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OF

MENTAL SCIENCE.

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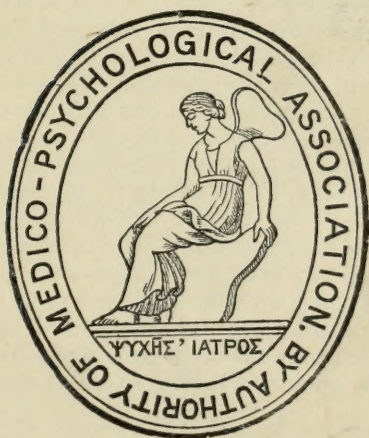
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VOL. LXVII.



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J. & A. CHURCHILL,

7, GREAT MARLBOROUGH STREET.

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“In adopting our title of the *Journal of Mental Science*, published by authority of the *Medico-Psychological Association*, we profess that we cultivate in our pages mental science of a particular kind, namely, such mental science as appertains to medical men who are engaged in the treatment of the insane. But it has been objected that the term mental science is inapplicable, and that the term mental physiology or mental pathology, or psychology, or psychiatry (a term much affected by our German brethren), would have been more correct and appropriate; and that, moreover, we do not deal in mental science, which is properly the sphere of the aspiring metaphysical intellect. If mental science is strictly synonymous with metaphysics, these objections are certainly valid; for although we do not eschew metaphysical discussion, the aim of this JOURNAL is certainly bent upon more attainable objects than the pursuit of those recondite inquiries which have occupied the most ambitious intellects from the time of Plato to the present, with so much labour and so little result. But while we admit that metaphysics may be called one department of mental science, we maintain that mental physiology and mental pathology are also mental science under a different aspect. While metaphysics may be called speculative mental science, mental physiology and pathology, with their vast range of inquiry into insanity, education, crime, and all things which tend to preserve mental health, or to produce mental disease, are not less questions of mental science in its practical, that is in its sociological point of view. If it were not unjust to high mathematics to compare it in any way with abstruse metaphysics, it would illustrate our meaning to say that our practical mental science would fairly bear the same relation to the mental science of the metaphysicians as applied mathematics bears to the pure science. In both instances the aim of the pure science is the attainment of abstract truth; its utility, however, frequently going no further than to serve as a gymnasium for the intellect. In both instances the mixed science aims at, and, to a certain extent, attains immediate practical results of the greatest utility to the welfare of mankind; we therefore maintain that our JOURNAL is not inaptly called the *Journal of Mental Science*, although the science may only attempt to deal with sociological and medical inquiries, relating either to the preservation of the health of the mind or to the amelioration or cure of its diseases; and although not soaring to the height of abstruse metaphysics, we only aim at such metaphysical knowledge as may be available to our purposes, as the mechanician uses the formularies of mathematics. This is our view of the kind of mental science which physicians engaged in the grave responsibility of caring for the mental health of their fellow-men may, in all modesty, pretend to cultivate; and while we cannot doubt that all additions to our certain knowledge in the speculative department of the science will be great gain, the necessities of duty and of danger must ever compel us to pursue that knowledge which is to be obtained in the practical departments of science with the earnestness of real workmen. The captain of a ship would be none the worse for being well acquainted with the higher branches of astronomical science, but it is the practical part of that science as it is applicable to navigation which he is compelled to study.”—Sir F. C. Bucknill, M.D., F.R.S.

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- 1841. Dr. Blake, Nottingham.
- 1842. Dr. de Vitre, Lancaster.
- 1843. Dr. Conolly, Hanwell.
- 1844. Dr. Thurnam, York Retreat.
- 1847. Dr. Wintle, Warneford House, Oxford.
- 1851. Dr. Conolly, Hanwell.
- 1852. Dr. Wintle, Warneford House.

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- 1854. A. J. Sutherland, M.D., St. Luke's Hospital, London.
- 1855. J. Thurnam, M.D., Wilts County Asylum.
- 1856. J. Hitchman, M.D., Derby County Asylum.
- 1857. Forbes Winslow, M.D., Sussex House, Hammersmith.
- 1858. John Conolly, M.D., County Asylum, Hanwell.
- 1859. Sir Charles Hastings, D.C.L.
- 1860. J. C. Bucknill, M.D., Devon County Asylum.
- 1861. Joseph Lalor, M.D., Richmond Asylum, Dublin.
- 1862. John Kirkman, M.D., Suffolk County Asylum.
- 1863. David Skae, M.D., Royal Edinburgh Asylum.
- 1864. Henry Munro, M.D., Brook House, Clapton.
- 1865. Wm. Wood, M.D., Kensington House.
- 1866. W. A. F. Browne, M.D., Commissioner in Lunacy for Scotland.
- 1867. C. A. Lockhart Robertson, M.D., Haywards Heath Asylum.
- 1868. W. H. O. Sankey, M.D., Sandywell Park, Cheltenham.
- 1869. T. Laycock, M.D., Edinburgh.
- 1870. Robert Boyd, M.D., County Asylum, Wells.
- 1871. Henry Maudsley, M.D., The Lawn, Hanwell.
- 1872. Sir James Coxe, M.D., Commissioner in Lunacy for Scotland.
- 1873. Harrington Tuke, M.D., Manor House, Chiswick.
- 1874. T. L. Rogers, M.D., County Asylum, Rainhill.
- 1875. J. F. Duncan, M.D., Dublin.
- 1876. W. H. Parsey, M.D., Warwick County Asylum.
- 1877. G. Fielding Blandford, M.D., London.
- 1878. Sir J. Crichton-Browne, M.D., Lord Chancellor's Visitor.
- 1879. J. A. Lush, M.D., Fisherton House, Salisbury.
- 1880. G. W. Mould, M.R.C.S., Royal Asylum, Cheadle.
- 1881. D. Hack Tuke, M.D., London.
- 1882. Sir W. T. Gairdner, M.D., Glasgow.
- 1883. W. Orange, M.D., State Criminal Lunatic Asylum, Broadmoor.
- 1884. Henry Rayner, M.D., County Asylum, Hanwell.
- 1885. J. A. Eames, M.D., District Asylum, Cork.
- 1886. Sir Geo. H. Savage, M.D., Bethlem Royal Hospital.
- 1887. Sir Fred. Needham, M.D., Barnwood House, Gloucester.
- 1888. Sir T. S. Clouston, M.D., Royal Edinburgh Asylum.
- 1889. H. Hayes Newington, F.R.C.P., Ticehurst, Sussex.
- 1890. David Yellowlees, M.D., Gartnavel Asylum, Glasgow.
- 1891. E. B. Whitcombe, M.R.C.S., City Asylum, Birmingham.
- 1892. Robert Baker, M.D., The Retreat, York.
- 1893. J. Murray Lindsay, M.D., County Asylum, Derby.
- 1894. Conolly Norman, F.R.C.P.I., Richmond Asylum, Dublin.
- 1895. David Nicolson, C.B., M.D., State Criminal Lunatic Asylum, Broadmoor.
- 1896. William Julius Mickle, M.D., Grove Hall Asylum, Bow.
- 1897. Thomas W. McDowall, M.D., Morpeth, Northumberland.
- 1898. A. R. Urquhart, M.D., James Murray's Royal Asylum, Perth.
- 1899. J. B. Spence, M.D., Burntwood Asylum, nr. Lichfield, Staffordshire.
- 1900. Fletcher Beach, M.B., 79, Wimpole Street, W. 1.
- 1901. Oscar T. Woods, M.D., District Asylum, Cork, Ireland.
- 1902. J. Wigglesworth, M.D., Rainhill Asylum, near Liverpool.
- 1903. Ernest W. White, O.B.E., M.B., Betley House, nr. Shrewsbury.

- 1904. R. Percy Smith, M.D., 36, Queen Anne Street, Cavendish Square, London, W. 1.
- 1905. T. Outterson Wood, M.D., 40, Margaret Street, Cavendish Square, London, W. 1.
- 1906. Sir Robert Armstrong-Jones, *C.B.E.*, M.D., Claybury Asylum, Woodford Bridge, Essex.
- 1907. P. W. MacDonald, M.D., County Asylum, Dorchester.
- 1908. Chas. A. Mercier, M.D., 34, Wimpole Street, London W. 1.
- 1909. W. Bevan-Lewis, M.Sc., L.R.C.P., late Medical Director, West Riding Asylum, Wakefield.
- 1910. John Macpherson, M.D., Commissioner in Lunacy, 8, Darnaway Street, Edinburgh.
- 1911. Wm. R. Dawson, *O.B.E.*, M.D., Inspector of Lunatic Asylums, Dublin Castle, Dublin.
- 1912. J. Greig Soutar, M.B., Barnwood House, Gloucester.
- 1913. James Chambers, M.D., The Priory, Roehampton, S.W.
- 1914-18. David G. Thomson, *C.B.E.*, M.D., County Asylum, Thorpe, Norfolk.
- 1918. John Keay, *C.B.E.*, M.D., Edinburgh War Hospital, Bangour.
- 1919. Bedford Pierce, M.D., The Retreat, York.
- 1920. William F. Menzies, M.D., Medical Superintendent, Staffordshire County Mental Hospital, Cheddleton, near Leek.

HONORARY MEMBERS.

1896. Allbutt, Sir T. Clifford, *K.C.B.*, D.L., LL.D., D.Sc., M.D.Lond., F.R.S., Regius Professor of Physic, Univ. Camb., St. Radegund's, Cambridge.
1918. Bevan-Lewis, William, M.Sc.Leds, M.R.C.S., L.R.C.P.Lond., 22, Cromwell Road, Hove. (PRESIDENT, 1909-10.)
1907. Bianchi, Prof. Leonardo, Manicomio Provinciale di Napoli. Musee N. 3, Naples, Italy. (*Corr. Mem.*, 1896.)
1900. Blumer, G. Alder, M.D., L.R.C.P.Edin., Butler Hospital, Providence, U.S.A. (*Ord. Mem.*, 1890.)
1900. Bresler, Johannes, M.D., Sanitätsrat, Director of the Provincial Mental Hospital, Kreuzburg, Oberschlesien, Germany. (Editor of the *Psychiatrisch-neurologische Wochenschrift*.) (*Corr. Mem.* 1896.)
1902. Brush, Edward N., M.D., Sheppard and Enoch Pratt Hospital, Towson, Maryland, U.S.A.
1920. Colin, Dr. H., 26, Rue Vanquelin, Paris (V^e), France.
1917. Colles, John Mayne, LL.D.Dubl., K.C., J.P., Registrar in Lunacy (Supreme Court of Judicature in Ireland), Lunacy Office, Four Courts, Dublin.
1909. Collins, Sir Wm. Job, *K.C.V.O.*, D.L., B.Sc., M.D., M.S.Lond., F.R.C.S. Eng., 1, Albert Terrace, Regent's Park, N.W. 1.
1912. Considine, Thomas Ivory, F.R.C.S., L.R.C.P.Irel., Inspector of Lunatic Asylums, Ireland, Office of Lunatic Asylums, Dublin Castle, Dublin.
1918. Cooke, Sir Edward Marriott, *K.B.E.*, M.D.Lond., Commissioner in Lunacy, 43, Colherne Court, South Kensington, S.W. 5.
1902. Coupland, Sidney, M.D., F.R.C.P.Lond., Commissioner of the Board of Control, "Plas Gwyn," Frognal, Hampstead, London, N.W. 3.
1876. Crichton-Browne, Sir J., LL.D., D.Sc., M.D.Edin., F.R.S., Lord Chancellor's Visitor, Royal Courts of Justice, Strand, London, W.C. 2., and 45, Hans Place, London, S.W. 1. (PRESIDENT, 1878.)
1911. Donkin, Sir Horatio Bryan, M.A., M.D.Oxon., F.R.C.P.Lond. (Medical Adviser to Prison Commissioners and Director of Convict Prisons), 28, Hyde Park Street, London, W. 2.
1895. Ferrier, Sir David, LL.D., M.D., F.R.C.P.Lond., F.R.S., 34, Cavendish Square, London, W. 1.
1872. Fraser, John, M.B., C.M., F.R.C.P.Edin., Formerly Commissioner in Lunacy, 54, Great King Street, Edinburgh.
1909. Kraepelin, Dr. Emil, Professor of Psychiatry, The University, Munich.
1910. Macpherson, John, M.D., F.R.C.P.Edin., Commissioner in Lunacy, 8, Darnaway Street, Edinburgh. (PRESIDENT, 1910.) (*Ordinary Member from 1886.*)
1889. Needham, Sir Frederick, M.D.St. And., M.R.C.P.Edin., M.R.C.S.Eng., Commissioner of the Board of Control, 19, Campden Hill Square, Kensington, London, W. 8. (PRESIDENT, 1887.)
1909. Obersteiner, Dr. Heinrich, Professor of Neurology, The University, Vienna.
1881. Peeters, M., M.D., Gheel, Belgium.
1911. Semelaigne, René, M.D.Paris, Secrétaire des Séances de la Société Medico-Psychologique de Paris, 16, Avenue de Madrid, Neuilly, Seine, France. (*Corresponding Member from 1893.*)
1901. Toulouse, Dr. Edouard, Directeur du Laboratoire de Psychologie expérimental à l'Ecole des Hautes Etudes Paris et Médecin en chef de l'Asile de Villejuif, Seine, France.
1910. Trevor, Arthur Hill, Esq., B.A.Oxon., of the Inner Temple, Barrister at Law, Commissioner of the Board of Control, 4, Albemarle Street, London, W. 1.

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- 1911. Boedeker, Prof. Dr. Justus Karl Edmund, Privat Docent and Director,
Fichtenhof Asylum, Schlachtensee, Berlin.
- 1897. Buschan, Dr. G., Stettin, Germany.
- 1904. Caroleñ, Wilfrid, Manicomio de Las Corts, Barcelona, Spain.
- 1896. Cowan, F. M., M.D., 109, Perponcher Straat, The Hague, Holland.
- 1911. Falkenberg, Dr. Wilhelm, Sanitätstrat, Direktor der Berliner, Torenan-
stalt, Herzberge, Berlin-Lichtenberg.
- 1907. Ferrari, Giulio Cesare, M.D., Director of the Manicomio Provinciale,
Imola, Bologna, Italy.
- 1911. Friedlander, Prof. Dr. Adolf Albrecht, Haus Sonnblick, Littenweiler, bei
Freiburg i/Baden, Germany.
- 1901. Gommès, Dr. Marcel, 5, Rue Parrot, Paris XII.
- 1909. Pilcz, Dr. Alexander, VIII/2 Alserstrasse 43, Wien, Austria.

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Alphabetical List of Members of the Association on December 31st, 1920, with the year in which they joined.

1900. Abbott, Henry Kingsmill, B.A., M.D.Dubl., D.P.H.Irel., Medical Superintendent, Hants County Asylum, Fareham.
1891. Adair, Thomas Stewart, M.D., C.M.Edin., F.R.M.S., Medical Superintendent, Storthes Hall Asylum, Kirkburton, near Huddersfield. (*Hon. Sec. N. and M. Division, 1908-20.*)
1910. Adam, George Henry, M.R.C.S., L.R.C.P.Lond., Manager and Medical Superintendent, West Malling Place, Kent.
1868. Adams, Josiah O., M.D.Durh., F.R.C.S.Eng., J.P., 117, Cazenove Road, Stamford Hill, London, N. 16.
1919. Adey, J. K., M.B., C.M.Melb., Receiving House, Royal Park, Melbourne, Australia.
1886. Agar, S. Hollingsworth, jun., B.A.Camb., M.R.C.S.Eng., L.S.A., Hurst House, Henley-in-Arden.
1899. Alexander, Hugh de Maine, M.D., C.M.Edin., Medical Superintendent, Aberdeen City District Asylum, Kingseat, Newmachar, Aberdeen.
1899. Allmann, Dorah Elizabeth, M.B., B.Ch.R.U.I., Assistant Medical Officer, District Asylum, Armagh.
1908. Anderson, James Richard Sumner, M.B., Ch.B.Glasg., Senior Assistant Medical Officer, Cumberland and Westmorland Mental Hospital, Garlands, Carlisle.
1898. Anderson, John Sewell, M.R.C.S., L.R.C.P.Lond., Senior Assistant Medical Officer, Hull City Asylum, Willerby, near Hull.
1918. Anderson, William Kirkpatrick, M.B., Ch.B.Glasg., Dykebar War Hospital, Paisley; 2, Woodside Crescent, Glasgow.
1912. Annandale, James Scott, M.B., Ch.B.Aberd., Wadsley Asylum, nr. Sheffield.
1912. Apthorp, Frederick William, M.R.C.S.Eng., L.R.C.P.Edin., M.P.C., Senior Medical Officer, St. George's Retreat, Ravensworth, Burgess Hill.
1904. Archdale, Mervyn Alex., M.B., B.S.Durh., Medical Superintendent, County Mental Hospital, Cambridge.
1905. Archdall, Mervyn Thomas, L.R.C.P.&S.Edin., L.R.F.P.&S.Glasg., L.S.A. Lond., Brynn-y-Nenadd Hall, Llanfairfechan, N. Wales.
1918. Archibald, Alexander John, M.B., Ch.B.Glasg., 245, Langlands Road, Govan, Glasgow.
1918. Archibald, Madeline, L.R.C.P.&S.Edin., L.R.F.P.&S.Glasg., 245, Langlands Road, Govan, Glasgow.
1882. Armstrong-Jones, Sir Robert, C.B.E., M.D., B.S., F.R.C.P.Lond., F.R.C.S.Eng., 105, Harley Street, W. 1 (and Plâs Dinas, Carnarvon, North Wales). (*Gen. Secretary from 1897 to 1906.*) (PRESIDENT, 1906-7.)
1910. Auden, G. A., M.A., M.D., B.Ch.Camb., F.R.C.P.Lond., D.P.H.Camb., F.S.A., School Medical Officer, Education Office, Council House, Margaret Street, Birmingham.
1891. Aveline, Henry T. S., M.D.Durh., M.R.C.S., L.R.C.P.Lond., M.P.C., Medical Superintendent, County Asylum, Cotford, near Taunton, Somerset. (*Hon. Sec. for S.W. Division, 1905-11.*)
1903. Bailey, William Henry, M.D.Lond., M.R.C.S.Eng., L.S.A., D.P.H.Lond., Featherstone Hall, Southall, Middlesex.
1909. Bain, John, M.A., M.B., B.Ch.Glasg., Mental Hospital, Rowditch, Derby.
1913. Bainbridge, Charles Frederick, M.B., Ch.B.Edin., Assistant Medical Officer, Devon County Mental Hospital, Exminster.
1906. Baird, Harvey, M.D., Ch.B.Edin., Periteau, Winchelsea, Sussex.
1878. Baker, H. Morton, M.B., C.M.Edin., 7, Belsize Square, London, N.W. 3.

1888. Baker, Sir John, M.D., C.M.Aberd., 18, Nettlecombe Avenue, Southsea.
1904. Barham, Guy Foster, M.A., M.D., B.Ch.Camb., M.R.C.S., L.R.C.P.Lond., Medical Superintendent, Claybury Mental Hospital, Woodford Bridge, Essex.
1919. Barkas, Mary Rushton, M.Sc.N.Z., M.B.Lond., M.R.C.S., L.R.C.P.Lond., 46, Connaught Street, London, W. 2.
1913. Barkley, James Morgan, M.B., Ch.B.Edin., Senior Medical Officer, Bracebridge Asylum, Lincolnshire.
1910. Bartlett, George Norton, M.B., B.S.Lond., M.R.C.S., L.R.C.P.Lond., Medical Superintendent, City Asylum, Exeter.
1901. Baskin, J. Loughheed, M.D.Bru., L.R.C.P.&S.Edin., L.R.F.P.&S.Glasg., c/o Messrs. Holt & Co., Charing Cross, S.W. 1.
1902. Baugh, Leonard D. H., M.B., Ch.B.Edin., The Pleasaunce, York.
1874. Beach, Fletcher, M.B., F.R.C.P.Lond., 5, De Crespigny Park, Denmark Hill, S.E. 5. (*Secretary Parliamentary Committee, 1896-1906. General Secretary, 1889-1896. PRESIDENT, 1900.*)
1892. Beadles, Cecil F., M.R.C.S., L.R.C.P.Lond., Gresham House, Egham Hill, Egham.
1913. Bedford, Percy William Page, M.B., Ch.B., Dipl. Psych. Edin., West Riding Asylum, Wakefield, Yorks.
1909. Beeley, Arthur, M.Sc.Leeds, M.D., B.S.Lond., M.R.C.S., L.R.C.P.Lond., D.P.H.Camb. (*Assistant Medical Officer, E. Sussex Educational Committee*), Windybank, King Henry's Road, Lewes.
1914. Bennett, James Wodderspoon, M.R.C.S., L.R.C.P.Lond., Senior Assistant Medical Officer, County Mental Hospital, Stafford.
1912. Benson, Henry Porter D'Arcy, M.D., C.M., F.R.C.S., M.R.C.P.Edin., Farnham House, Finglas, Dublin.
1914. Benson, John Robinson, F.R.C.S.Eng., L.R.C.P.Lond., Resident Physician and Proprietor, Fiddington House, Market Lavington, Wilts.
1899. Beresford, Edwyn H., M.R.C.S., L.R.C.P.Lond., Medical Superintendent, Tooting Bec Mental Hospital, Tooting, London, S.W. 17.
1912. Berncastle, Herbert M., M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, Croydon Mental Hospital, Warlingham, Surrey.
1920. Birch, W. S., M.C., M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, City of London Mental Hospital, Dartford, Kent.
1894. Blachford, James Vincent, C.B.E., M.D., B.S.Durh., M.R.C.S., L.R.C.P.Lond., M.P.C., City Asylum, Fishponds, Bristol.
1913. Black, Robert Sinclair, M.A.Edin., M.D., C.M.Aberd., D.P.H., M.P.C., Medical Supt., Pietermaritzburg Mental Hospital, Natal, South Africa.
1898. Blair, David, M.A., M.D., C.M.Glasg., County Asylum, Lancaster.
1919. Blake, Stanley, L.R.C.P.&S.Irel., Assistant Medical Officer, Portrane Asylum, Donabate, Ireland.
1919. Blakiston, Frederick Cairns, M.R.C.S., L.R.C.P.Lond., Medical Superintendent, Isle of Man Asylum.
1897. Blandford, Joseph John Guthrie, B.A.Camb., M.R.C.S., L.R.C.P.Lond., D.P.H.Camb., Whalley, Lanes.
1918. Blandford, Walter Folliott, B.A.Camb., M.R.C.S., L.R.C.P.Lond., Temporary Assistant Medical Officer, Caterham Mental Hospital, Caterham, Surrey.
1904. Bodvel-Roberts, Hugh Frank, M.A.Camb., M.R.C.S., L.R.C.P.Lond., L.S.A., Napsbury Mental Hospital, near St. Albans, Herts.
1920. Boland, J. J., M.B., B.Ch.N.U.I., Assistant Medical Officer, Ballinasloe Asylum, Ireland.
1900. Bolton, Joseph Shaw, D.Sc., M.D., B.S., F.R.C.P.Lond., Medical Superintendent, West Riding Asylum, Wakefield.
1892. Bond, Charles Hubert, C.B.E., D.Sc., M.D., C.M.Edin., F.R.C.P.Lond., M.P.C., Commissioner of the Board of Control, 66, Victoria Street, London, S.W. 1. (*Hon. General Secretary, 1906-12.*) (PRESIDENT-ELECT.)

1920. Bowen, Tudor David John, M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, Napsbury Mental Hospital, Napsbury, St. Albans.
1918. Bower, Cedric William, L.M.S.S.A., Joint Medical Officer, Springfield House, near Bedford.
1877. Bower, David, M.D., C.M.Aberd., Springfield House, Bedford. (*Chairman, Parliamentary Committee, 1907-1910.*)
1877. Bowes, John Ireland, M.R.C.S.Eng., L.S.A. (address uncommunicated).
1917. Bowie, Edgar Ormond, L.A.H.Dubl., Dip. Grant Med. Coll. Bombay, L.M.Coombe, Dublin; c/o W. H. Halliburton, Esq., 18, South Frederick Street, Dublin.
1900. Bowles, Alfred, M.R.C.S., L.R.C.P.Lond., 10, South Cliff, Eastbourne.
1896. Boycott, Arthur N., M.D.Lond., M.R.C.S., L.R.C.P.Lond., Medical Superintendent, Herts County Mental Hospital, Hill End, St. Albans, Herts. (*Hon. Sec. for S.-E. Division, 1900-05.*)
1898. Boyle, A. Helen A., M.D.Bru.x., L.R.C.P.&S.Edin., 9, The Drive, Hove, Brighton.
1891. Braine-Hartnell, George M. P., M.R.C.S., L.R.C.P.Lond., Medical Superintendent, County and City Mental Hospital, Powick, Worcester.
1911. Brander, John, M.B., C.B.Edin., Assistant Medical Officer, London County Mental Hospital, Bexley, Kent.
1919. Branthwaite, Robert Welsh, C.B., M.D.Bru.x., M.R.C.S., L.R.C.P., D.P.H.Lond., Commissioner of the Board of Control, 66, Victoria Street, London, S.W. 1.
1905. Brown, Harry Egerton, M.D., Ch.B.Glasg., M.P.C., Mental Hospital, Fort Beaufort, Cape Province, S. Africa.
1908. Brown, Robert Cunyngham, C.B.E., M.D., B.S.Durh., Ministry of Pensions, Westminster, London, S.W. 1.
1908. Brown, R. Dods, M.D., Ch.B., F.R.C.P., Dipl. Psych., D.P.H.Edin., Medical Superintendent, The Royal Asylum, Aberdeen.
1912. Brown, William, M.D., C.M.Glasg., M.P.C., District Medical Officer, Adviser in Lunacy to Bristol Magistrates, 1, Manor Road, Fishponds, Bristol.
1916. Brown, William, D.Sc.Lond., M.A., M.D., B.Ch.Oxon., Reader in Psychology in the University of London (King's College), (King's College, Strand, London, W.C. 2); 13, Welbeck Street, W. 1.
1917. Bruce, Alexander Ninian, D.Sc., M.D., F.R.C.P.Edin., Lecturer on Neurology, University of Edinburgh, 8, Ainslie Place, Edinburgh.
1893. Bruce, Lewis C., M.C., M.D., F.R.C.P.Edin., M.P.C., Medical Superintendent, District Asylum, Druid Park, Murthly, N.B.) (*Co-Editor of Journal 1911-1916; Hon. Sec. for Scottish Division, 1901-1907.*)
1913. Brunton, George Llewellyn, M.D., Ch.B.Edin., Senior Assistant Medical Officer, North Riding Asylum, Clifton, York.
1920. Bryce, William Henderson, M.B., C.M.Edin., Medical Superintendent, Kenlaw House, Colinsburgh, Fife.
1912. Buchanan, William Murdoch, M.B., Ch.B.Glasg., Kirklands Asylum, Bothwell, Lanarkshire. (*Hon. Sec. for Scottish Division from 1920.*)
1908. Bullmore, Charles Cecil, L.R.C.P.&S.Edin., L.R.F.P.&S.Glasg., Medical Superintendent, Flower House, Catford, London, S.E. 6.
1912. Burke, J. D. G., M.B., B.Ch.R.U.I., St. Audry's Hospital, Melton, Suffolk.
1910. Cahir, John P., M.B., B.Ch.R.U.I., 198, Camberwell New Road, Camberwell, London, S.E. 5.
1891. Caldecott, Charles, M.B., B.S.Lond., M.R.C.S., L.R.C.P.Lond., Medical Superintendent, Royal Earlswood Institution, Redhill, Surrey.
1894. Campbell, Alfred Walter, M.D., C.M.Edin., M.P.C., Macquarie Chambers, 183, Macquarie Street, Sydney, New South Wales.
1909. Campbell, Donald Graham, M.B., C.M.Edin., "Auchinellan," 12, Reidhaven Street, Elgin.
1914. Campbell, Finlay Stewart, M.D., C.M.Glasg., Deputy Director of Medical Services, Ministry of National Service, Ayr, Scotland.
1897. Campbell, Robert Brown, M.D., C.M., F.R.C.P.Edin., Stirling District Asylum, Larbert. (*Secretary for Scottish Division, 1910-20.*)

1905. Carre, Henry, L.R.C.P.&S.Irel., Woodilee Asylum, Lenzie, Glasgow.
1891. Carswell, John, F.R.F.P.&S.Glasg., L.R.C.P.Edin., J.P., Commissioner, Board of Control, Scotland, 25, Palmerston Place, Edinburgh.
1874. Cassidy, D. M., M.D., C.M.McGill Coll., Montreal, D.Sc. (Public Health), F.R.C.S.Edin., Medical Superintendent, County Asylum, Lancaster.
1888. Chambers, James, M.A., M.D.R.U.I., M.P.C., The Priory, Roehampton, London, S.W. 15. (*Co-Editor of Journal* 1905-1914, *Assistant Editor* 1900-05.) (*PRESIDENT*, 1913-14.) (*Treasurer* since 1917.)
1911. Chambers, Walter Duncan, M.A., M.D., Ch.B.Edin., M.P.C., Deputy Commissioner, Board of Control, Scotland, 1, Craiglea Place, Edinburgh.
1865. Chapman, Thomas Algernon, M.D.Glasg., L.R.C.S.Edin., F.R.S., F.Z.S., Betula, Reigate.
1915. Cheyne, Alfred William Harper, M.B., Ch.B.Aberd., Assistant Medical Officer, Royal Asylum, Aberdeen.
1917. Chisholm, Percy, L.R.C.P. & S.Edin., L.R.F.P. & S.Glasg., Assistant Medical Officer, Stirling District Asylum, Larbert.
1907. Chislett, Charles G. A., M.B., Ch.B.Glasg., Medical Superintendent, Stoneyetts, Chryston, Lanark.
1880. Christie, J. W. Stirling, L.R.C.P.&S.Edin., 21, St. Matthew's Gardens, St. Leonards-on-Sea.
1878. Clapham, Wm. Crochley S., M.D., F.R.C.P.Edin., M.R.C.S.Eng., F.S.S., The Five Gables, Mayfield, Sussex. (*Hon. Sec. N. and M. Division*, 1897-1901.)
1920. Clark, R.M., M.B., C.M.Edin., Medical Superintendent, Whittingham Asylum, Lancashire.
1907. Clarke, Geoffrey, M.D.Lond., Superintendent, Ministry of Pensions Hospital, Ewell, Surrey.
1910. Clarke, James Kilian P., M.B., B.Ch.R.U.I., D.P.H., High Street, Oakham.
1907. Clarkson, Robert Durward, B.Sc., M.D., C.M.Edin., F.R.C.P.Edin. (Medical Officer, Scottish National Institute for the Education of Imbecile Children), The Park, Larbert, Stirling.
1892. Cole, Robert Henry, M.D.Lond., F.R.C.P.Lond., 25, Upper Berkeley Street, London, W.1. (*Secretary of Parliamentary Committee* since 1912.)
1900. Cole, Sydney John, M.A., M.D., B.Ch.Oxon., Medical Superintendent, Wilts County Asylum, Devizes.
1906. Collier, Walter Edgar, M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, Kent County Mental Hospital, Maidstone.
1903. Collins, Michael Abdy, O.B.E., M.D., B.S.Lond., M.R.C.S., L.R.C.P.Lond., Medical Superintendent, Chartham Mental Hospital, near Canterbury, Kent. (*Hon. General Secretary*, 1912-18.)
1910. Conlon, Thomas Peter, L.R.C.P.&S.Irel., Resident Medical Superintendent, District Asylum, Monaghan.
1920. Connell, O. G., M.C., L.R.C.P.&S.Irel., Senior Assistant Medical Officer, Norfolk County Mental Hospital, Thorpe, Norwich.
1914. Connolly, Victor Lindley, M.C., M.B., B.Ch.Belf., Assistant Medical Officer, Long Grove Mental Hospital, Epsom, Surrey.
1910. Coombes, Percival Charles, M.R.C.S., L.R.C.P.Lond., Medical Superintendent, Surrey County Mental Hospital, Netherne.
1905. Cooper, K. D., L.R.C.P.&S.Edin., L.R.F.P.&S.Glasg., c/o Leopold & Co. Apollo, Bunder, Bombay.
1903. Cormac, Harry Dove, M.B., B.S.Madras, Medical Superintendent, Cheshire County Asylum, Macclesfield.
1891. Corner, Harry, M.D.Lond., M.R.C.S., L.R.C.P.Lond., M.P.C., 37, Harley Street, London, W.1.
1917. Costello, Christopher, M.B., B.Ch.N.U.I., Assistant Medical Officer, Portrane Asylum, Ireland.
1897. Cotton, William, M.A., M.D.Edin., D.P.H., M.P.C., 231, Gloucester Road, Bishopston, Bristol.
1910. Coupland, William Henry, L.R.C.S.&P.Edin., Medical Superintendent, Royal Albert Institution, Albert House, Haverbreaks, Lancaster.

1913. Court, E. Percy, M.R.C.S., L.R.C.P.Lond., Severalls Mental Hospital, Colchester.
1893. Cowen, Thomas Philip, M.D., B.S.Lond., M.R.C.S., L.R.C.P.Lond., Medical Superintendent, County Asylum, Rainhill, Lancashire.
1911. Cox, Donald Maxwell, M.R.C.S., L.R.C.P.Lond., County and City Mental Hospital, Burghill, nr. Hereford.
1918. Cox, The Rt. Hon. M. F., LL.D., M.D.R.U.I., F.R.C.P.Irel., Physician, St. Vincent's Hospital, Dublin; Lord Chancellor's Consulting Visitor in Lunacy for County and City of Dublin; 26, Merrion Square, Dublin.
1893. Craig, Sir Maurice, C.B.E., M.A., M.D., B.Ch.Camb., F.R.C.P.Lond., M.P.C., 87, Harley Street, London, W. 1. (*Hon. Secretary of Educational Committee, 1905-8; Chairman of Educational Committee since 1912.*)
1897. Cribb, Harry Gifford, M.R.C.S., L.R.C.P.Lond., Medical Superintendent, Winterton Asylum, Ferryhill, Durham.
1911. Crichlow, Charles Adolphus, M.B., Ch.B.Glasg., Roxburgh District Asylum, Melrose.
1917. Crocket, James, M.D.Edin., D.P.H., Medical Superintendent, Colony of Mercy for Epileptics, Consumption Sanatoria of Scotland, Craigielea, Bridge of Weir.
1904. Cross, Harold Robert, L.S.A.Lond., F.R.G.S., Storthes Hall Asylum, Kirkburton, near Huddersfield.
1915. Crosthwaite, Frederick Douglas, M.B., Ch.B.Edin., D.P.H., Assistant Physician, Pretoria Mental Hospital, South Africa.
1919. Cuthbert, James Harvey, M.B., Ch.B.Edin., Senior Assistant Medical Officer, West Ham Mental Hospital, Goodmayes, Essex.
1907. Daniel, Alfred Wilson, B.A., M.D., B.Ch.Camb., M.R.C.S., L.R.C.P.Lond., Medical Superintendent, London County Mental Hospital, Hanwell, London, W. 7. (*Secretary of Educational Committee.*)
1896. Davidson, Andrew, M.D., C.M.Aberd., M.P.C., Wyoming, Macquarie Street, Sydney, N.S.W.
1914. Davies, Laura Katherine, M.B., Ch.B.Edin., Pathologist and Assistant Medical Officer, Edinburgh City Asylum, Bangour, Dechmont, Linlithgowshire.
1891. Davis, Arthur N., L.R.C.P.&S.Edin., Medical Superintendent, County Asylum, Exminster, Devon.
1894. Dawson, William R., O.B.E., B.A., M.D., B.Ch.Dubl., F.R.C.P.Irel., M.P.C., D.P.H., Inspector of Lunatics in Ireland, 7, Ailesbury Road, Dublin. (*Hon. Sec. to Irish Division, 1902-11; PRESIDENT, 1911-12; Co-Editor of the Journal since 1920.*)
1920. Dawson, William Siegfried, M.A., M.B., B.Ch.Oxon., M.R.C.P.Lond., Assistant Medical Officer, Hanwell Mental Hospital, Hanwell, London, W. 7.
1901. De Steiger, Adèle, M.D.Lond., Essex County Mental Hospital, Brentwood, Essex.
1905. Devine, Henry, O.B.E., M.D., B.S., F.R.C.P.Lond., M.R.C.S.Eng., M.P.C., Medical Superintendent, Borough Mental Hospital, Milton, Portsmouth. (*Co-Editor of the Journal since 1920; Assistant Editor 1916-20.*)
1904. Devon, James, F.R.F.P. & S.Glasg., L.R.C.P. & S.Edin., 11, Rutland Square, Edinburgh.
1915. Dillon, Frederick, M.B., Ch.B.Edin., Assistant Medical Officer, Northumberland House, Green Lanes, Finsbury Park, London, N. 4.
1909. Dillon, Kathleen, L.R.C.P.&S.Irel., Assistant Medical Officer, District Asylum, Mullingar.
1905. Dixon, J. Francis, M.A., M.D., B.Ch.Dubl., M.P.C., Medical Superintendent, Borough Mental Hospital, Humberstone, Leicester.
1879. Dodds, William J., D.Sc., M.D., C.M.Edin., 15, Marina Road, Prestwick, Ayrshire.
1889. Donaldson, William Ireland, B.A., M.D., B.Ch.Dubl., 2, Abbeylands, Killiney, Co. Dublin.

1892. Donelan, John O'Connor, L.R.C.P.&S.Irel., M.P.C., St. Dymphna's, North Circular Road, Dublin (Med. Supt., Richmond Asylum, Dublin).
1890. Douglas, William, M.D.R.U.I., M.R.C.S.Eng., F.R.G.S., 26, Queensbury Place, S. Kensington, S.W. 7.
1910. Downey, Michael Henry, M.B., Ch.B.Melb., L.R.C.P. & S.Edin., L.R.F.P. & S. Glasg., Medical Superintendent, Parkside Asylum, Adelaide, South Australia.
1919. Drake-Brockman, Henry George, F.R.C.S.Edin., M.R.C.S., L.R.C.P.Lond., The Mental Hospital, Middlesbrough.
1916. Drummond, William Blackley, M.D., C.M.Edin., F.R.C.P.Edin., Medical Superintendent, Baldovan Institution, Dundee.
1907. Dryden, A. Mitchell, M.B., Ch.B.Edin., Senior Assistant Medical Officer, Woodilee Mental Hospital, Lenzie.
1902. Dudgeon, Herbert Wm., M.D., B.S.Durh., M.R.C.S., L.R.C.P.Lond., Medical Superintendent, Khanka Government Asylum, Egypt.
1899. Dudley, Francis, L.R.C.P.&S.Irel., Medical Superintendent, County Asylum, Bodmin, Cornwall.
1915. Duff, Thomas, L.R.C.P. & S.Edin., L.R.F.P.&S.Glasg., Collington Rise, Bexhill-on-Sea.
1920. Duncan, Jessie Galloway, M.B., Ch.B.Glasg., D.P.H.Camb., Visiting M.O., South Side Home for Mental Defectives, Streatham; 33, Heybridge Avenue, Streatham, London, S.W. 16.
1903. Dunston, John Thomas, M.D., B.S.Lond., Medical Superintendent, West Koppies Mental Hospital, Pretoria, South Africa.
1911. Dykes, Percy Armstrong, M.R.C.S., L.R.C.P.Lond., Kingsdown House, Box, Wilts.
1899. Eades, Albert I., L.R.C.P.&S.Irel., Medical Superintendent, North Riding Asylum, Clifton, Yorks.
1906. Eager, Richard, *O.B.E.*, M.D., Ch.B.Aberd., M.P.C., Assistant Medical Officer, The Devon County Mental Hospital, Exminster.
1891. Earls, James Henry, M.D., M.Ch.R.U.I., L.S.A., D.P.H.Lond., M.P.C., Barrister-at-Law, Fenstanton, Christchurch Road, Streatham Hill, London, S.W. 2.
1907. East, Wm. Norwood, M.D.Lond., M.R.C.S., L.R.C.P.Lond., M.P.C., H.M. Prison, Manchester; 17, Walton Park, Liverpool.
1895. Easterbrook, Charles C., M.A., M.D., F.R.C.P.Edin., M.P.C., J.P., Physician Superintendent, Crichton Royal Institution, Dumfries.
1914. Eder, M. D., B.Sc.Lond., M.R.C.S., L.R.C.P.Lond. (Medical Officer, Deptford School Clinic), 37, Welbeck Street, London, W. 1.
1895. Edgerley, Samuel, M.A., M.D., C.M.Edin., M.P.C., Medical Superintendent, West Riding Asylum, Menston, nr. Leeds.
1897. Edwards, Francis Henry, M.D.Bru.x., M.R.C.S.Eng., M.R.C.P.Lond., Medical Superintendent, Camberwell House, London, S.E. 5.
1919. Eggleston, Henry, M.B., B.S.Durh., Allerton Tower Home of Recovery, Woolton, Liverpool.
1901. Elgee, Samuel Charles, *O.B.E.*, L.R.C.P.&S.Irel., Medical Superintendent, Cane Hill Mental Hospital, Coulsdon, Surrey.
1889. Elkins, Frank Ashby, M.D., C.M.Edin., M.P.C., Medical Superintendent, Metropolitan Asylum, Leavesden, Herts.
1912. Ellerton, John Frederick Heise, M.D.Bru.x., M.R.C.S.Eng., L.R.C.P. Edin., Rotherwood, Leamington Spa.
1917. Ellis, Vincent C., M.B., B.Ch.Dubl., Assistant Medical Officer, Richmond Asylum, Grangegorman, Dublin.
1908. Ellison, Arthur, M.R.C.S., L.R.C.P.Lond., Deputy Medical Officer, H.M. Prison, Leeds; 10, Sholebroke Avenue, Leeds.
1899. Ellison, F. C., B.A., M.D., B.Ch.Dubl., Resident Medical Superintendent, District Asylum, Castlebar.
1911. Emslie, Isabella Galloway, M.D., Ch.B.Edin., Royal Asylum, Morningside, Edinburgh.
1911. English, Ada, M.B., B.Ch.R.U.I., Assistant Medical Officer, District Asylum, Ballinasloe.

1901. Erskine, Wm. J. A., M.D., C.M.Edin., Medical Superintendent, County Mental Hospital, Whitecroft, Newport, I. of W.
1895. Eurich, Frederick Wilhelm, M.D., C.M.Edin., 8, Mornington Villas, Maningham Lane, Bradford.
1894. Eustace, Henry Marcus, B.A., M.D., B.Ch.Dubl., M.P.C., Medical Superintendent, Hampstead and Highfield Private Asylum, Glasnevin, Dublin.
1909. Eustace, William Neilson, L.R.C.S. & P.Irel., Lisronagh, Glasnevin, Co. Dublin.
1918. Evans, A. Edward, M.B., B.S.Lond., M.R.C.S., L.R.C.P.Lond., D.P.H. Liverp. (Inspector, Board of Control), 3, Rotherwick Court, Golders Green, London, N.W. 4.
1918. Evans, Tudor Benson, M.B., Ch.B.Liverp., 184, Upper Warwick Street, Liverpool.
1891. Ewan, John Alfred, M.A. St. And., M.D., C.M.Edin., M.P.C., Greylees, Sleaford, Lincs.
1914. Ewing, Cecil Wilmot, L.R.C.P.&S.Irel., Storthes Hall Asylum, Kirkburton, Huddersfield.
1894. Farquharson, William F., M.D., C.M.Edin., M.P.C., Medical Superintendent, Counties Asylum, Garlands, Carlisle.
1907. Farries, John Stothart, L.R.C.P.&S.Edin., L.R.F.P.&S.Glasg., The Cottage, Hethersgill, Carlisle.
1903. Fennell, Charles Henry, M.A., M.D.Oxon, M.R.C.P.Lond., Reform Club, Pall Mall, London, S.W. 1.
1908. Fenton, Henry Felix, M.B., Ch.B.Edin., Assistant Medical Officer, County and City Mental Hospital, Powick, Worcester.
1907. Ferguson, J. J. Harrower, M.C., M.B., Ch.B.Edin., 72, Wimpole Street, W. 1.
1906. Fielding, Saville James, M.B., B.S.Durh., Medical Superintendent, Bethel Hospital, Norwich.
1873. Finch, John E. M., M.A., M.D.Camb., M.R.C.S.Eng., L.S.A.Lond., Holmdale, Stoneygate, Leicester.
1889. Finlay, David, M.D., C.M.Glasg., Medical Superintendent, County Asylum, Bridgend, Glamorgan.
1906. Firth, Arthur Marcus, M.A., M.D., B.Ch.Edin., Deputy Medical Superintendent, Worcestershire County Mental Hospital, Bromsgrove, Worcestershire.
1903. Fitzgerald, Alexis, L.R.C.P.&S.Irel., Medical Superintendent, District Asylum, Waterford.
1888. Fitz-Gerald, Gerald C., B.A., M.D., B.Ch.Camb., M.P.C., Church House, Rye, Sussex.
1903. Fitzgerald, James Francis, L.R.C.P.&S.Irel., Assistant Medical Officer, District Asylum, Clonmel, co. Tipperary, Ireland.
1904. Fleming, Wilfrid Louis Remi, M.R.C.S., L.R.C.P.Lond., Suffolk House, Pirbright, Surrey.
1894. Fleury, Eleonora Lilian, M.D., B.Ch.R.U.I., Assistant Medical Officer, Richmond Asylum, Dublin.
1908. Flynn, Thos. Aloysius, L.R.C.P.&S.Irel., County Asylum, Thorpe, Norwich.
1902. Forde, Michael J., M.D., B.Ch.R.U.I., Assistant Medical Officer, Richmond Asylum, Dublin.
1911. Forrester, Archibald Thomas William, M.D., B.S.Lond., M.R.C.S., L.R.C.P.Lond., Senior Assistant Medical Officer, Leicester and Rutland Counties Mental Hospital, Narborough.
1916. Forsyth, Charles Wesley, M.D.Lond., M.R.C.S., L.R.C.P.Lond., Senior Assistant Medical Officer, Rubery Hill Mental Hospital, near Birmingham.
1913. Forward, Ernest Lionel, M.R.C.S., L.R.C.P.Lond., The Coppice, Nottingham.
1913. Fothergill, Claude Francis, B.A., M.B., B.Ch.Camb., M.R.C.S., L.R.C.P.Lond.; "Carnosan," Chorley Wood, Herts; and 150, Harley Street, W. 1.

1912. Fox, Charles J., M.R.C.S., L.R.C.P.Lond., 41, Station Road, Clacton-on-Sea.
1920. Fox, J. Tylor, M.A., M.D., B.Ch.Camb., Medical Superintendent, Lingfield Epileptic Colony; The Homestead, Lingfield, Surrey.
1881. Fraser, Donald, M.D., C.M.Glasg., F.R.F.P. & S.Glas., 13, Royal Terrace West, Glasgow.
1919. Fraser, Kate, B.Sc., M.D., Ch.B.Glasg., D.P.H., Deputy Commissioner, General Board of Control, Scotland; 13, Royal Terrace West, Glasgow.
1902. Fuller, Lawrence Otway, M.R.C.S., L.R.C.P.Lond., Medical Superintendent, 'Three Counties' Mental Hospital, Arlesey, Beds.
1906. Gane, Edward Palmer Steward, M.D.Durh., M.R.C.S., L.R.C.P.Lond., The Coppice, Nottingham.
1912. Garry, John William, M.B., B.Ch.N.U.I., Assistant Medical Superintendent, Clare County Asylum, Ennis, Ireland.
1912. Gavin, Lawrence, M.B., Ch.B., L.R.C.P.&S.Edin., L.R.F.P.&S.Glasg., Superintendent, Mullingar District Asylum, Ireland.
1896. Geddes, John W., M.B., C.M.Edin., Medical Superintendent, Mental Hospital, Middlesbrough, Yorks.
1892. Gemmel, James Francis, M.B.Glasg., Medical Superintendent, County Asylum, Whittingham, Preston.
1919. Gifford, John, B.A.Cape, M.B., Ch.B.Edin., Senior Assistant Medical Officer, Derby County Asylum, Mickleover, Derby.
1899. Gilfillan, Samuel James, O.B.E., M.A., M.B., C.M.Edin., Medical Superintendent, London County Mental Hospital, Colney Hatch, London, N. 11.
1889. Gill, Stanley A., B.A.Dubl., M.D.Durh., M.R.C.S., M.R.C.P.Lond., Shaftesbury House, Formby, Liverpool.
1904. Gillespie, Daniel, M.C., M.D., B.Ch., D.P.M.R.U.I., Wadsley Asylum, near Sheffield.
1920. Gillis, Kurt, M.B., Ch.B.Edin., Assistant Physician, Mental Hospital, Bloemfontein, O.F.S., South Africa.
1897. Gilmour, John Rutherford, M.B., C.M., F.R.C.P.Edin., M.P.C., Medical Superintendent, West Riding Asylum, Scalebor Park, Burley-in-Wharfedale, Yorks. (*Hon. Sec. N. and M. Division from 1920.*)
1906. Gilmour, Richard Withers, M.B., B.S.Durh., M.R.C.S., L.R.C.P.Lond., Homewood House, West Meon, Hants.
1878. Glendinning, James, M.D.Glasg., L.R.C.S.Edin., Lyndhurst, Avenue Road, Abergavenny.
1897. Good, Thomas Saxty, M.R.C.S., L.R.C.P.Lond., Medical Superintendent, County Asylum, Littlemore, Oxford.
1889. Goodall, Edwin, C.B.E., M.D., B.S., F.R.C.P.Lond., M.P.C., Medical Superintendent, City Mental Hospital, Cardiff.
1918. Goodfellow, Thomas Ashton, B.Sc., M.D.Lond., M.R.C.S., L.R.C.P.Lond., 60, Palatine Road, West Didsbury, Manchester.
1920. Gordon, George, M.B., Ch.B.Glasg., Medical Officer, Lord Derby War Hospital; c/o Holt & Co., 3, Whitehall Place, London, S.W. 1.
1899. Gordon, James Leslie, M.D., C.M.Aberd., Karaissi, Caterham, Surrey.
1905. Gordon-Munn, John Gordon, M.D., F.R.S.Edin., Heigham Hall, Norwich.
1901. Gostwyck, C. H. G., M.B., Ch.B., F.R.C.P.Edin., M.P.C., Dipl. Psych., Stirling District Asylum, Larbert.
1912. Graham, Gilbert Malise, M.B., Ch.B.Edin., Surg.-Lt., R.N.
1914. Graham, Norman Bell, M.C., B.A.R.U.I., M.B., B.Ch.Belf., D.P.H., Assistant Medical Officer, District Asylum, Belfast.
1894. Graham, Samuel, L.R.C.P.Lond., Resident Medical Superintendent, District Asylum, Antrim.
1918. Graham, Samuel John, L.R.C.P.&S.Edin., L.R.F.P.&S.Glasg., Resident Medical Superintendent, Villa Colony Asylum, Purdysburn, Belfast.
1908. Graham, William S., M.B., B.Ch.R.U.I., Assistant Medical Officer, Somerset and Bath Asylum, near Taunton.

1915. Graves, T. Chivers, B.Sc., M.D., B.S.Lond., F.R.C.S.Eng., Medical Superintendent, Rubery Hill Mental Hospital, nr. Birmingham.
1916. Gray, Cyril, L.R.C.P.&S.Edin., L.R.F.P.&S.Glasg., Gateshead Borough Asylum, Stannington, Newcastle-on-Tyne.
1909. Greene, Thomas Adrian, L.R.C.S.&P.Irel., J.P., Medical Superintendent, District Asylum, Carlow.
1912. Greeson, Clarence Edward, M.D., Ch.B.Aberd., c/o Messrs. Holt & Co., 3, Whitehall Place, London, S.W. 1.
1901. Grills, Galbraith Hamilton, M.D., B.Ch.R.U.I., Dipl. Psych., Medical Superintendent, County Asylum, Chester.
1916. Grimby, Alan F., M.A., M.D., B.Ch.Dubl., R.N. Hospital, Chatham.
1900. Grove, Ernest George, M.R.C.S., L.R.C.P.Lond., Crossways House, Ministry of Pensions Hospital, Maghull, near Liverpool.
1894. Gwynn, Charles Henry, M.D., C.M.Edin., M.R.C.S.Eng., co-Licensee, St. Mary's House, Whitchurch, Salop.
1894. Halsted, Harold Cecil, M.D.Durh., M.R.C.S., L.R.C.P.Lond., Manor Road, Selsey, Sussex.
1920. Hancock, Allen Coulter, M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, Cane Hill Mental Hospital, Coulsdon, Surrey.
1920. Harding, Edward Palmer, L.R.C.P.&S.Irel., Assistant Medical Officer, East Riding Mental Hospital, Beverley, Yorks.
1899. Harmer, W. A., L.S.A., Resident Superintendent and Licensee, Redlands Private Asylum, Tonbridge, Kent.
1920. Harper, R. Sydney, M.R.C.S., L.R.C.P.Lond., F.R.M.S., Neurologist in Charge Psycho-Therapeutic Clinic, Ministry of Pensions, Brighton; 4, Adelaide Crescent, Hove, Sussex.
1904. Harper-Smith, George Hastie, B.A.Camb., M.R.C.S., L.R.C.P.Lond., (Senior Assistant Medical Officer, Brighton County Borough Mental Hospital, Haywards Heath), May Cottage, Loughton, Essex.
1898. Harris-Liston, L., M.D.Bruce, M.R.C.S., L.R.C.P.Lond., L.S.A., Middleton Hall, Middleton St. George, Co. Durham.
1905. Hart, Bernard, M.D.Lond., M.R.C.S., L.R.C.P.Lond., 81, Wimpole Street, London, W. 1, and Northumberland House, Finsbury Park, London, N. 4.
1886. Harvey, Bagenal Crosbie, L.R.C.P.&S.Edin., L.A.H.Dubl., Resident Medical Superintendent, District Asylum, Clonmel, Ireland.
1892. Haslett, William John H., M.R.C.S., L.R.C.P.Lond., M.P.C., Resident Medical Superintendent, Halliford House, Sunbury-on-Thames.
1890. Hay, J. F. S., M.B., C.M.Aberd., Inspector-General of Asylums for New Zealand, Government Buildings, Wellington, New Zealand.
1900. Haynes, Horace E., M.R.C.S.Eng., L.S.A., J.P., Littleton Hall, Brentwood, Essex.
1920. Haynes, Horace Guy Lankester, M.R.C.S., L.R.C.P.Lond., Littleton Hall, Brentwood, Essex.
1920. Heal, James Gordon Freeman, M.D., C.M., Dalhousie, L.M.S., N. Scotia, "Swallow's Nest," Felixstowe.
1911. Heffernan, P., I.M.S., B.A., M.B., B.Ch.C.U.I., Rangemoor, Bakewell, Derby.
1920. Henderson, Cyril John, M.B.Durh., Assistant Medical Officer, The Royal Albert Institution for the Feeble-Minded, Lancaster.
1916. Henderson, David Kennedy, M.D., Ch.B.Edin., F.R.F.P.&S.Glasg., Senior Assistant Physician, Royal Asylum, Gartnavel, Glasgow.
1905. Henderson, George, M.A., M.B., Ch.B.Edin., 25, Commercial Road, Peckham, London, S.E. 15.
1877. Hetherington, Charles E., B.A., M.B., M.Ch.Dubl., St. Lawrence Hill, Londonderry, Ireland.
1877. Hewson, R. W., L.R.C.P.&S.Edin., Medical Superintendent, Coton Hill, Stafford.
1914. Hewson, R. W. Dale, L.R.C.P.&S.Edin., L.R.F.P.&S.Glasg., Coton Hill Hospital, Stafford.

1912. Higson, William Davis, M.B., Ch.B.Liverp., D.P.H., Deputy Medical Officer, H.M. Prison, Brixton; 7, Clovelly Gardens, Upper Tulse Hill, London, S.W. 2.
1882. Hill, H. Gardiner, M.R.C.S.Eng., L.S.A., Pentillie, Leopold Road, Wimbledon Park, London, S.W. 19.
1920. Hills, T. W. S., M.A., B.Ch.Camb., L.S.A., Senior Assistant Medical Officer, Leavesden Mental Hospital, Kings Langley, Herts.
1914. Hills, Harold William, B.Sc., M.B., B.S.Lond., M.R.C.S., M.R.C.P.Lond., D.P.M., Long Grove Mental Hospital, Epsom.
1909. Hodgson, Harold West, M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, Severalls Mental Hospital, Colchester.
1908. Hogg, Archibald, M.B., Ch.B.Glasg., 54, High Street, Paisley, N.B.
1900. Holländer, Bernard, M.D.Freib., M.R.C.S., L.R.C.P.Lond., 57, Wimpole Street, London, W. 1.
1920. Hooper, Reginald Arthur, M.B., B.S.Durh., Assistant Medical Officer, Netherne Mental Hospital, Coulsdon, Surrey.
1903. Hopkins, Charles Leighton, B.A., M.B., B.Ch.Camb., Medical Superintendent, York City Asylum, Fulford, York.
1918. Horton, Wilfred Winnall, M.D., C.M.Edin., Medical Superintendent, Wye House, Buxton.
1894. Hotchkis, Robert D., M.A.Glasg., M.D., B.S.Durh., M.R.C.S., L.R.C.P.Lond., M.P.C., Renfrew District Asylum, Dykebar, Paisley, N.B.
1912. Hughes, Frank Percival, M.B., B.S.Lond., M.R.C.S., L.R.C.P.Lond., The Grove, Pinner, Middlesex.
1900. Hughes, Percy T., M.B., C.M.Edin., D.P.H., Medical Superintendent, Worcestershire County Mental Hospital, Barnesley Hall, Broms-grove.
1904. Hughes, William Stanley, M.B., B.S.Lond., M.R.C.S., L.R.C.P.Lond., Medical Superintendent, Shropshire County Asylum, Bicton Heath, Shrewsbury.
1897. Hunter, David, M.A., M.B., B.Ch.Camb., L.S.A., Medical Superintendent, The Coppice, Nottingham. (*Secretary for S. E. Division, 1910-1913.*)
1912. Hunter, George Yeates Cobb, *I.M.S.*, M.R.C.S., L.R.C.P.Lond., M.P.C., c/o Messrs. Grindlay & Co., 54, Parliament Street, London, S.W. 1.
1904. Hunter, Percy Douglas, M.R.C.S., L.R.C.P.Lond., Three Counties Mental Hospital, Arlesey, Beds.
1888. Hyslop, Theo. B., M.D., C.M.Edin., M.R.C.P., L.R.C.S., F.R.S.Edin., M.P.C., 5, Portland Place, London, W. 1.
1915. Ingall, Frank Ernest, F.R.C.S.Eng., L.R.C.P.Lond., D.P.H., Tue Brook Villa, Liverpool.
1908. Inglis, J. P. Park, M.B., Ch.B.Edin., Assistant Medical Officer, Caterham Mental Hospital, Caterham, Surrey.
1906. Irwin, Peter Joseph, L.R.C.P.&S.Irel., Medical Superintendent, District Asylum, Limerick.
1920. Jackson, John Luke, M.B., B.Ch.Belf., Senior Assistant Medical Officer and Deputy Superintendent, Hants County Asylum, Knowle, Fareham.
1914. James, George William Blomfield, M.C., M.D., B.S.Lond., The Lawn, Hillingdon, Uxbridge.
1908. Jeffrey, Geo. Rutherford, M.D., Ch.B.Glasg., F.R.C.P.Edin., M.P.C., Medical Superintendent, Bootham Park, York.
1893. Johnston, Gerald Herbert, L.R.C.P.&S.Edin., L.R.F.P.&S.Glas., Brooke House, Upper Clapton, London, N. 5.
1919. Johnston, Millicent Hamilton, B.A., M.B., B.Ch.Dubl., Assistant Medical Officer, Brentwood Mental Hospital, Essex.
1905. Johnston, Thomas Leonard, L.R.C.P.&S.Edin., L.R.F.P.&S.Glasg., Medical Superintendent, Bracebridge Asylum, Lincoln.

1912. Johnstone, Emma May, L.R.C.P. & S.Edin., L.R.F.P.&S.Glasg., M.P.C., D.P.M.Camb., City Mental Hospital, Humberstone, Leicester.
1878. Johnstone, J. Carlyle, M.D., C.M.Glasg., Melrose, Roxburgh.
1903. Johnstone, Thomas, M.D., C.M.Edin., M.R.C.P.Lond., Annandale, Harrogate.
1879. Kay, Walter S., M.D., C.M.Edin., M.R.C.S.Eng., The Grove, Starbech, Harrogate.
1886. Keay, John, *C.B.E.*, M.D., C.M.Glasg., F.R.C.P.Edin., Medical Superintendent, Bangour Village, Uphall, Linlithgowshire. (PRESIDENT, 1918.)
1909. Keith, William Brooks, *M.C.*, M.D., Ch.B.Aberd., M.P.C., Senior Assistant Medical Officer, Surrey County Mental Hospital, Brookwood.
1907. Keene, George Henry, M.D., B.Ch.Dubl., 14, Palmerston Park, Dublin.
1899. Kennedy, Hugh T. J., L.R.C.P.&S.Irel., Medical Superintendent, District Asylum, Enniscorthy, Co. Wexford.
1920. Kerr, Felix Arthur, M.B., Ch.B.Glasg., Assistant Medical Officer, Rubery Hill Mental Hospital, Birmingham.
1897. Kerr, Hugh, M.A., M.D.Glasg., Medical Superintendent, Bucks County Mental Hospital, Stone, Aylesbury, Bucks.
1902. Kerr, Neil Thomson, M.B., C.M.Edin., J.P., Medical Superintendent, Lanark District Asylum, Hartwood, Lanarkshire.
1893. Kershaw, Herbert Warren, M.R.C.S., L.R.C.P.Lond., 1, Stanhope Road, Darlington.
1920. Key, Gordon James, M.B., Ch.B.Aberd., Assistant Physician, Mental Hospital, Bloemfontein, O.F.S., South Africa.
1897. Kidd, Harold Andrew, *C.B.E.*, M.R.C.S., L.R.C.P.Lond., Medical Superintendent, West Sussex Mental Hospital, Chichester.
1916. Kilgariff, Joseph O'Loughlin, B.A., M.B., B.Ch.Dubl., Assistant Medical Officer, County Asylum, Prestwich, Lancs.
1920. Kimber, William Joseph Teil, M.R.C.S., L.R.C.P.Lond., Senior Assistant Medical Officer, Herts County Mental Hospital, Hill End, St. Albans.
1903. King, Frauk Raymond, B.A.Camb., M.R.C.S., L.R.C.P.Lond., Medical Superintendent, Peckham House, Peckham, London, S.E.
1902. King-Turner, A. C., M.B., C.M.Edin., The Retreat, Fairford, Gloucestershire.
1915. Kirwan, Richard R., M.B., B.Ch.R.U.I., Assistant Medical Officer, West Riding Asylum, Menston, Leeds.
1915. Kitson, Frederick Hubert, M.B., Ch.B.Leeds, Assistant Medical Officer, West Riding Asylum, Wakefield.
1919. Knight, Mary Reid, M.A., M.B., Ch.B.Glasg., Assistant Medical Officer, Paisley District Asylum, Riccartbar, Paisley, Scotland.
1903. Kough, Edward Fitzadam, B.A., M.B., B.Ch.Dubl., Senior Assistant Medical Officer, County Asylum, Gloucester.
1898. Labey, Julius, M.R.C.S., L.R.C.P., L.S.A.Lond., Medical Superintendent, Public Asylum, Jersey.
1902. Langdon-Down, Percival L., M.A., M.B., B.Ch.Camb., Normansfield, Hampton Wick, Middlesex.
1896. Langdon-Down, Reginald L., M.A., M.B., B.Ch.Camb., M.R.C.P.Lond., Normansfield, Hampton Wick.
1919. Langton, Peregrine Stephen Brackenbury, M.B., B.S.Lond., M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, York City Asylum, Fulford, York.
1914. Ladell, R. G. Macdonald, M.B., Ch.B.Vict., The Gables, Killinghall, Harrogate.
1919. Latham, Oliver, M.B., C.M.Syd., Pathologist, Lunacy Department, University, Sydney, N.S.W.

1909. Laurie, James, M.B., C.M.Glasg. (*Visiting Medical Officer, Asylum and Poorhouse, Greenock, Smithson*), Red House, Ardgowan Street, Greenock, Renfrewshire.
1902. Laval, Evariste, M.B., C.M.Edin., The Guildhall, Westminster, London, S.W. 1.
1898. Lavers, Norman, M.D.Bru.x., M.R.C.S., L.R.C.P.Lond., Medical Superintendent, Bailbrook House, Bath.
1892. Lawless, George Robert, F.R.C.S., L.R.C.P.Irel., Medical Superintendent, District Asylum, Armagh.
1870. Lawrence, Alexander, M.A., M.D., C.M.Aberd., 26, Hough Green, Chester.
1883. Layton, Henry A., M.R.C.S., L.R.C.P.Edin., 26, Kimbolton Road, Bedford.
1915. Leech, H. Brougham, B.A., M.D., B.Ch.Dubl., Senior Assistant Medical Officer, County Asylum, Hatton, Warwick.
1909. Leech, John Frederick Wolseley, B.A., M.D., B.Ch.Dubl., Assistant Medical Officer, County Asylum, Devizes, Wilts.
1899. Leeper, Richard R., F.R.C.S., L.R.C.P.Irel., M.P.C., Medical Superintendent, St. Patrick's Hospital, Dublin. (*Hon. Sec. to the Irish Division since 1911.*)
1883. Legge, Richard J., M.D.R.U.I., L.R.C.S.Edin., 8, Bath Place, Cheltenham.
1906. Leggett, William, B.A., M.D., B.Ch.Dubl., Smithston Asylum, Greenock, Scotland.
1916. Lewis, Edward, L.R.C.P. & S.Edin., L.R.F.P.&S.Glasg., Cwirlai, Ty-Cross, Anglesey.
1920. Lilley, George Austen, M.D.Camb., M.R.C.S., L.R.C.P.Lond. Assistant Medical Officer, Cane Hill Mental Hospital, Coulsdon, Surrey.
1914. Lindsay, David George, L.R.C.P.&S.Edin., L.R.F.P.&S.Glasg., Dovecot House, Auchtermuchty, Fife.
1908. Littlejohn, Edward Salteine, M.R.C.S., L.R.C.P.Lond., Medical Superintendent, Manor Mental Hospital, Epsom.
1920. Lloyd-Dodd, E. H. H., L.R.C.P.&S.Irel., Assistant Medical Officer, Leavesden Mental Hospital; Woodside, Leavesden, Watford, Herts.
1898. Lord, John R., C.B.E., M.B., C.M.Edin., Medical Superintendent, Horton Mental Hospital, Epsom. (*Co-Editor of Journal since 1911; Assistant Editor of Journal, 1900-11.*)
1906. Lowry, James Arthur, M.D., B.Ch.R.U.I., Medical Superintendent, Surrey County Asylum, Brookwood.
1904. Lyall, C. H. Gibson, L.R.C.P.&S.Edin., Leicester Borough Mental Hospital, Leicester.
1872. Lyle, Thomas, M.D., C.M.Glasg., 34, Jesmond Road, Newcastle-on-Tyne.
1920. McAlister, William, M.A., M.B., Ch.B.Edin., Assistant Physician, Royal Asylum, Morningside, Edinburgh.
1906. Macarthur, John, M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, Colney Hatch Mental Hospital, London, N. 11.
1880. MacBryan, Henry C., L.R.C.P.&S.Edin., Kingsdown House, Box, Wilts.
1900. McClintock, John, L.R.C.P.&S.Edin., Resident Medical Superintendent, Grove House, All Stretton, Church Stretton, Salop.
1920. McCowan, Peter Knight, M.B., Ch.B.Edin., Assistant Medical Officer, Cane Hill Mental Hospital, Coulsdon, Surrey.
1901. MacDonald, James H., M.B., Ch.B., F.R.F.P.&S.Glasg., Govan District Asylum, Hawkhead, Paisley, N.B.
1884. MacDonald, P. W., M.D., C.M.Aberd., Grasmere, Spa Road, Weymouth. (*First Hon. Sec. S.W. Div. 1894 to 1905.*) (*PRESIDENT, 1907-8.*)
1911. MacDonald, Ranald, M.D., Ch.B.Edin., London County Mental Hospital, Bexley, Kent.
1905. MacDonald, William Fraser, M.B., Ch.B.Edin., M.P.C., 96, Polworth Terrace, Edinburgh.

1905. McDougall, Alan, M.D., Ch.B.Vict., M.R.C.S., L.R.C.P.Lond., Medical Director, The David Lewis Colony, Sandle Bridge, near Alderley Edge, Cheshire.
1911. McDougall, William, M.A., M.B., B.Ch.Camb., M.Sc.Vict., Harvard Boston, U.S.A.
1906. McDowall, Colin Francis Frederick, M.D., B.S.Durh., Medical Superintendent, Ticehurst House, Ticehurst, Sussex.
1870. McDowall, Thomas W., M.D., L.R.C.S.Edin., "Burwood," Wadhurst, Sussex. (PRESIDENT, 1897-8.)
1895. Macfarlane, Neil M., M.D., C.M.Aberd., Medical Superintendent, Government Hospital, Thlotse Heights, Leribe, Basutoland, South Africa.
1902. McGregor, John, M.B., Ch.B.Edin., Senior Assistant Medical Officer, County Asylum, Bridgend, Glam.
1917. McIver, Colin, M.R.C.S., L.R.C.P.Lond., I.M.S., c/o Messrs. Grindlay & Co., Bombay, India.
1914. Mackay, Magnus Ross, M.D., Ch.B.Edin., Newport Borough Mental Hospital, Caerleon, Mon.
1917. Mackay, Norman Douglas, B.Sc., M.D., Ch.B., D.P.H.St. And., Dall-Avon, Aberfeldy, Perthshire.
1915. McKenna, Edward Joseph, M.B., B.Ch.R.U.I., Assistant Medical Officer, District Asylum, Carlow.
1911. Mackenzie, John Cosserat, M.B., Ch.B.Edin., County Mental Hospital, Burntwood, near Lichfield.
1891. Mackenzie, Henry J., M.B., C.M.Edin., M.P.C., Assistant Medical Officer, The Retreat, York.
1903. Mackenzie, Theodore Charles, M.D., Ch.B., F.R.C.P.Edin., M.P.C., Medical Superintendent, District Asylum, Inverness.
1920. McLachlan, Jessie Brown, M.B., Ch.B.Glasg., D.P.H.Camb., Assistant Medical Officer, Stirling District Asylum, Larbert, N.B.
1917. McMaster, Albert Victor, B.A.Belf., M.R.C.S., L.R.C.P.Lond., 25, Farnham Road, Bangor, Co. Down.
1904. Macnamara, Eric Danvers, M.A., M.D., B.Ch.Camb., F.R.C.P.Lond., 87, Harley Street, London, W. 1.
1910. MacPhail, Hector Duncan, M.A., M.D., Ch.B.Edin., Assistant Medical Officer, City Asylum, Gosforth, Newcastle-on-Tyne.
1882. Macphail, S. Rutherford, M.D., C.M.Edin., New Saughton Hall, Polton, Midlothian.
1901. McRae, G. Douglas, M.D., C.M., F.R.C.P.Edin., J.P., Medical Superintendent, District Asylum, Ayr, N.B. (*Co-Editor of the Journal since 1920; Assistant Editor 1916-20*).
1902. Macrae, Kenneth Duncan Cameron, M.C., M.B., Ch.B.Edin., Lynwood, Murrayfield, Midlothian.
1894. McWilliam, Alexander, M.A., M.B., C.M.Aberd., Waterval, Odiham, Winchfield, Hants.
1915. Manifold, Robert Feuton, B.A., M.B., B.Ch.Dubl., Senior Assistant Medical Officer, Denbigh Asylum, North Wales.
1908. Mapother, Edward, M.D., B.S.Lond., F.R.C.S.Eng., Senior Assistant Medical Officer, Long Grove Mental Hospital, Epsom.
1903. Marnan, John, B.A., M.B., B.Ch.Dubl., Medical Superintendent, County Asylum, Gloucester.
1896. Marr, Hamilton C., M.D., C.M., F.R.F.P.&S.Glasg., M.P.C., Commissioner in Lunacy (10, Succoth Avenue, Edinburgh). (*Hon. Sec. Scottish Division, 1907-1910*).
1905. Marshall, Robert Macnab, M.D., Ch.B.Glasg., M.P.C., 2, Clifton Place, Glasgow.
1908. Martin, Henry Cooke, M.B., Ch.B.Edin., Assistant Medical Officer, Newport Borough Asylum, Caerleon.
1896. Martin, James Charles, L.R.C.S. & P.Irel., J.P., Assistant Medical Officer District Asylum, Letterkenny, Donegal.
1908. Martin, James Ernest, M.B., B.S.Lond., M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, London County Mental Hospital, Hanwell, W. 7.

1907. Martin, Mary Edith, L.R.C.P.&S.Edin., L.R.F.P.&S.Glas., L.S.A.Lond., M.P.C., Bailbrook House, Bath.
1914. Martin, Samuel Edgar, M.B., B.Ch.Edin., Barrister-at-Law, Senior Assistant Medical Officer, St. Andrew's Hospital, Northampton.
1911. Martin, William Lewis, *O.B.E.*, M.A., B.Sc., M.B., C.M., D.P.H.Edin., M.P.C., Dipl. Psych. (*Certifying Physician in Lunacy, Edinburgh Parish Council*), 56, Bruntsfield Place, Edinburgh.
1911. Mathieson, James Moir, M.B., Ch.B.Aberd., Assistant Medical Officer, Wadsley Asylum, Sheffield; 172, Whitham Road, Broomhill, Sheffield.
1904. May, George Francis, M.D., C.M.McGill, L.S.A., Winterton, Asylum Ferryhill, Durham.
1912. Melville, William Spence, M.B., Ch.B.Glasg., 139, Fairbridge Road, Upper Holloway, N. 19.
1890. Menzies, William F., M.D., B.Sc.Edin., F.R.C.P.Lond., Medical Superintendent, Stafford County Mental Hospital, Cheddleton, near Leek. (PRESIDENT.)
1877. Merson, John, M.A., M.D., C.M.Aberd., Medical Superintendent, Borough Asylum, Hull.
1893. Middlemass, James, M.A., B.Sc., M.D., C.M., F.R.C.P.Edin., M.P.C., Medical Superintendent, Borough Asylum, Ryhope, Sunderland.
1910. Middlemiss, James Ernest, M.R.C.S., L.R.C.P.Lond.; 131, North Street, Leeds.
1883. Miles, George E., *C.B.E.*, M.R.C.S., L.R.C.P.Lond., late Superintendent Lunacy Dept, N.S.W.; c/o Bank of New South Wales, Threadneedle Street, E.C.
1887. Miller, Alfred A., M.B., B.Ch.Dubl., Medical Superintendent, Hatton Asylum, Warwick. (*Registrar since 1902.*)
1912. Miller, Richard, M.B., B.Ch.Dubl., Stock, Ingatstone.
1893. Mills, John, M.B., B.Ch., D.M.D., R.U.I., Medical Superintendent, District Asylum, Ballinasloe, Ireland.
1911. Moll, Jan. Marius, Doc. in Arts and Med, Utrecht Univ., L.M.S.S.A. Lond., M.P.C., Box 2587, Johannesburg, South Africa.
1913. Molyneux, Benjamin Arthur, B.A., M.D., B.Ch.Dubl., St. Helens House, St. Helens, Hastings.
1910. Monnington, Richard Caldicott, M.D., Ch.B., D.P.H.Edin., D.P.M., Neurologist, Ministry of Pensions, 33, New Street, Salisbury.
1915. Monrad-Krohn, G. H., M.D., B.S., B.A.Christiania, M.R.C.S., M.R.C.P.Lond., M.P.C., Lecturer in Neurology at the University and Physician to the Neurological Section of Rikshospitalet, Christiania, Norway.
1899. Moore, Wm. D., M.D., M.Ch.R.U.I., Medical Superintendent, Holloway Sanatorium, Virginia Water, Surrey.
1914. Morres, Frederick, M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, Cane Hill Mental Hospital, Coulsdon, Surrey.
1917. Morris, Bedlington Howel, M.B., B.S.Durh., Inspector-General of Hospitals, South Australia; Pembroke Street, College Park, St. Peter's, S. Australia.
1896. Morton, W. B., M.D.Lond., M.R.C.S., L.R.C.P.Lond., Medical Superintendent, Wonford House, Exeter.
1896. Mott, Sir Frederick W., *K.B.E.*, LL.D.Edin., M.D., B.S., F.R.C.P.Lond., F.R.S., 25, Nottingham Place, Marylebone, London, W. 1.
1896. Mould, Gilbert E., M.R.C.S., L.R.C.P.Lond., The Grange, Rotherham, Yorks.
1897. Mould, Philip G., M.R.C.S., L.R.C.P.Lond., Overdale, Whitefield, Manchester.
1914. Moyes, John Murray, M.B., Ch.B.Edin., D.P.M.Leds, Tue Brook Villa, Liverpool, E.
1919. Mules, Annie Shortridge, M.R.C.S., L.R.C.P.Lond., House Physician, Devon and Exeter Hospital; Court Hall, Kenton, near Exeter.
1907. Mules, Bertha Mary, M.D., B.S.Durh., Court Hall, Kenton, S. Devon.

1911. Muncaster, Anna Lilian, M.B., B.Ch.Edin. (Assistant Medical Officer, County Asylum, Chester); 8, Craylockhart Terrace, Edinburgh.
1917. Munro, Robert, M.B., Ch.B.Aberd., Assistant Medical Superintendent, Royal Eastern Counties Institution, Colchester.
1919. Murnane, John, L.R.C.P. & S.Irel. & L.M., Portroe, Nenagh, Co. Tipperary.
1916. Murray, Jessie M., M.D., B.S.Durh., 14, Endsleigh Street, Tavistock Square, London, W.C. 1.
1909. Myers, Charles Samuel, M.A., D.Sc., M.D., B.Ch.Camb., M.R.C.S., L.R.C.P.Lond., F.R.S., 30, Montague Square, W. 1.
1903. Navarra, Norman, M.R.C.S., L.R.C.P.Lond., City of London Mental Hospital, near Dartford, Kent.
1910. Neill, Alex. W., M.D., Ch.B.Edin., Warneford Mental Hospital, Oxford.
1903. Nelis, William F., M.D.Durh., L.R.C.P.Edin., L.R.F.P.&S.Glasg., Medical Superintendent, Newport Borough Mental Hospital Caerleon, Mon.
1920. Nicol, William Drew, M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, London County Mental Hospital, Hanwell, London, W. 1.
1869. Nicolson, David, C.B., M.D., C.M.Aberd., M.R.C.P.Edin., F.S.A.Scot., 201, Royal Courts of Justice, Strand, London, W.C. 2. (PRESIDENT, 1895-6.)
1920. Nix, Sidney, M.D., B.S.Durh., L.R.C.P.&S.Edin., L.R.F.P.&S.Glasg., Senior Assistant Medical Officer, Graylingwell Mental Hospital, Chichester.
1888. Nolan, Michael J., L.R.C.P.&S.Irel., M.P.C. Medical Superintendent, District Asylum, Downpatrick.
1913. Nolan, James Noël Green, B.A., M.D., B.Ch.Dubl., Hellingly Mental Hospital, Sussex.
1909. Norman, Hubert James, M.B., Ch.B., D.P.H.Edin., Assistant Medical Officer, Camberwell House Asylum, Peckham Road, London, S.E. 5. (*Home address*: 51, Crystal Palace Park Road, Sydenham, London, S.E. 26.)
1920. Novis, Rupert Stanley, B.Sc., M.R.C.S., L.R.C.P.Lond., "Hensol," Chorley Wood, Herts.
1916. O'Carroll, Joseph, M.D., M.Ch.R.U.I., F.R.C.P.Irel.; Lord Chancellor's Medical Visitor in Lunacy; 43, Merrion Square, Dublin.
1903. O'Doherty, Patrick, B.A., M.B., B.Ch.R.U.I., District Asylum, Omagh.
1918. Ogilvie, William Mitchell, M.B., C.M.Aberd., Medical Superintendent, Ipswich Mental Hospital, Ipswich.
1901. Ogilvy, David, B.A., M.D., B.Ch.Dubl., Medical Superintendent, London County Mental Hospital, Long Grove, Epsom, Surrey.
1911. Oliver, Norman H., M.R.C.S., L.R.C.P.Lond., Barrister-at-Law, Officer in Charge, No. 4 Special Hospital for Officers, Latchmere, Ham Common, Surrey.
1892. O'Mara, Francis, L.R.C.P.&S.Irel., District Asylum, Ennis, Ireland.
1920. O'Neill, Arthur, M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, Napsbury Mental Hospital, Napsbury, St. Albans.
1902. Orr, David, M.D., C.M.Edin., M.P.C., Deputy Medical Superintendent, County Asylum, Prestwich, Lanes.
1910. Orr, James H. C., M.D., Ch.B.Edin., Rosslynlee Asylum, Midlothian.
1899. Osburne, Cecil A. P., F.R.C.S., L.R.C.P.Edin., The Grove, Old Catton, Norwich.
1914. Osburne, John C., M.B., B.Ch.N.U.I., Assistant Medical Officer, Lindville, Cork.
1890. Oswald, Landel R., M.B., C.M.Glasg., M.P.C., Physician Superintendent, Royal Asylum, Gartnavel, Glasgow.
1916. Overbeck-Wright, Alexander William, M.D., Ch.B.Aberd., M.P.C., D.P.H., Superintendent, Lunatic Asylum, Agra, U. P., India. *Address* 12, Rubislaw Terrace, Aberdeen.

1905. Paine, Frederick, M.D.Brux., M.R.C.S., M.R.C.P.Lond., Claybury Mental Hospital, Woodford Bridge, Essex.
1898. Parker, William Arnot, M.B., C.M.Glasg., M.P.C., Medical Superintendent, Gartloch Asylum, Gartcosh, N.B.
1920. Parkin, George Gray, M.B., Ch.B.Vict., Assistant Medical Officer, Cheshire County Asylum, Parkside, Macclesfield.
1920. Parnis, Henry William, M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, London County Mental Hospital, Colney Hatch, N. 11.
1898. Pasmore, Edwin Stephen, M.D., M.R.C.P.Lond., Chelsham House, Chelsham, Surrey.
1916. Patch, Charles James Lodge, M.C., L.R.C.P.&S. Edin., L.R.F.P.&S. Glasg., Capt. I.M.S.
1899. Patrick, John, M.B., Ch.B.R.U.I., Medical Superintendent, District Asylum, Omagh, Ireland.
1907. Peachell, George Ernest, M.D., B.S.Lond., M.R.C.S., L.R.C.P.Lond., M.P.C., Medical Superintendent, Dorset County Mental Hospital, Herrison, Dorchester.
1910. Pearn, Oscar Phillips Napier, M.R.C.S., L.R.C.P., L.S.A.Lond., Cane Hill Mental Hospital, Coulsdon, Surrey.
1915. Pennant, Dyfrig Huws, D.S.O., M.R.C.S., L.R.C.P.Lond., Penydre, Saundersfoot, Pembrokeshire.
1913. Penny, Robert Augustus Greenwood, M.R.C.S., L.R.C.P.Lond., Devon County Asylum, Exminster.
1920. Penson, John Frederick, M.A., M.B., B.Ch.Oxon., M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, London County Mental Hospital, Hanwell, London, W. 7.
1893. Perceval, Frank, M.R.C.S., L.R.C.P.Lond., Medical Superintendent, County Asylum, Prestwich, Manchester.
1911. Petrie, Alfred Alexander Webster, M.D., B.S.Lond., M.D., Ch.B., F.R.C.S.Edin., M.R.C.P.Lond., Assistant Medical Officer, Claybury Mental Hospital, Woodford Bridge, Essex.
1878. Philipps, Sutherland Rees, M.D., C.M.Q.U.I., F.R.G.S., Bredon, Fisher Street, Paignton.
1908. Phillips, John George Porter, M.D., B.S.Lond., M.R.C.S., M.R.C.P.Lond., M.P.C., Resident Physician and Superintendent, Bethlem Royal Hospital, Lambeth, London, S.E. 1.
1910. Phillips, John Robert Parry, M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, City Asylum, Bristol.
1906. Phillips, Nathaniel Richard, M.D.Brux., M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, County Asylum, Abergavenny, Monmouthshire.
1905. Phillips, Norman Routh, M.D.Brux., M.R.C.S., L.R.C.P.Lond., 67, Billing Road, Northampton.
1891. Pierce, Bedford, M.D., F.R.C.P.Lond., Medical Superintendent, The Retreat, York. (*Hon. Secretary N. and M. Division 1900-8.*) (PRESIDENT, 1919.)
1888. Pietersen, J. F. G., M.R.C.S., L.R.C.P.Lond., Ashwood House, Kingswinford, near Dudley, Stafford.
1896. Planck, Charles, M.A.Camb., M.R.C.S., L.R.C.P.Lond., Medical Superintendent, Brighton County Mental Hospital, Haywards Heath.
1912. Plummer, Edgar Curnow, M.R.C.S., L.R.C.P.Lond., Ministry of Pensions, Basinghall Street, Leeds.
1889. Pope, George Stevens, L.R.C.P.&S. Edin., L.R.F.P.&S. Glasg., Heigham Hall, Norwich.
1913. Potts, William A., M.A.Camb., M.D.Edin.&Birm., M.R.C.S., L.R.C.P.Lond., *Medical Officer to the Birmingham Committee for the Care of the Feeble-minded*, 118, Hagley Road, Birmingham.
1876. Powell, Evan, M.R.C.S.Eng., L.S.A., Medical Superintendent, City Lunatic Asylum, Nottingham.
1910. Powell, James Farquharson, M.R.C.S., L.R.C.P., D.P.H.Lond., M.P.C., Assistant Medical Officer, Mental Hospital, Caterham, Surrey.
1916. Power, Patrick William, L.R.C.P.&S.Irel., Senior Assistant Medical Officer, County Asylum, Chester.

1908. Prentice, Reginald Wickham, L.M.S.S.A.Lond., Beauworth Manor, Alresford, Hants.
1918. Prideaux, John Joseph Francis Engledue, M.R.C.S., L.R.C.P.Lond., 13, Hills Road, Cambridge.
1901. Pugh, Robert, M.D., Ch.B.Edin., Medical Superintendent, Brecon and Radnor Asylum, Talgarth, S. Wales.
1904. Race, John Percy, M.R.C.S., L.R.C.P., L.S.A.Lond., Assistant Medical Officer, Durham County Asylum, Winterton, Ferryhill, Durham (Wheatley Hill, Doncaster).
1899. Rainsford, F. E., B.A., M.D.Dubl., L.R.C.P.Irel., L.R.C.P.&S.Edin., Resident Physician, Stewart Institute, Palmerston, co. Dublin.
1894. Rambaut, Daniel F., M.A., M.D., B.Ch.Dubl., Medical Superintendent, St. Andrew's Hospital, Northampton.
1910. Rankine, Surg. Roger Aiken, R.N., M.B., B.S.Lond., M.R.C.S., L.R.C.P.Lond., M.P.C.
1889. Raw, Nathan, C.M.G., M.D., B.S.Durh., L.S.Sc., F.R.C.S.Edin., M.R.C.P.Lond., M.P.C., M.P., 58, Harley Street, W. 1.
1870. Rayner, Henry, M.D.Aberd., M.R.C.P.Edin., Upper Terrace House, Hampstead, London, N.W. 3. (PRESIDENT, 1884.) (*General Secretary*, 1877-89.) (*Co-Editor of Journal* 1895-1911.)
1913. Read, Charles Stanford, M.D., M.R.C.S., L.R.C.P.Lond., Physician, Fisherton House Mental Hospital, Salisbury.
1920. Read, Walter Wolfe, M.D.Bruce., M.R.C.S., L.R.C.P.Lond., Medical Superintendent, Berkshire County Asylum, Moulsholme.
1899. Redington, John, F.R.C.S.&P.Irel., Deputy Medical Superintendent, Portrane Asylum, Donabate, Co. Dublin.
1911. Reeve, Ernest Frederick, M.B., B.S.Lond., M.R.C.S., L.R.C.P.Lond., Senior Assistant Medical Officer, County Asylum, Rainhill, Lanes.
1911. Reid, Daniel McKinley, M.D., Ch.B.Glasg., Hawkhead Mental Hospital, Cardonald, Glasgow.
1910. Reid, William, M.A.St. And., M.B., Ch.B.Edin., Senior Assistant Medical Officer, Burntwood Asylum, Lichfield.
1886. Revington, George T., M.A., M.D., B.Ch.Dubl., M.P.C., Medical Superintendent, Central Criminal Asylum, Dundrum, Ireland.
1899. Rice, David, M.D.Bruce., M.R.C.S., L.R.C.P.Lond., D.P.H., Medical Superintendent, City Asylum, Hillesdon, Norwich.
1897. Richard, William J., M.A., M.B., Ch.M.Glasg., Merryflats, Govan, Glasgow.
1899. Richards, John, M.B., C.M., F.R.C.S.Edin., Medical Superintendent, Joint Counties Mental Hospital, Carmarthen.
1920. Rickman, John, M.A., M.B., B.Ch.Camb., 8, Fitzwilliam Street, Cambridge.
1911. Robarts, Henry Howard, M.D., Ch.B.Edin., D.P.H.Glasg., Ennerdale, Haddington, Scotland.
1914. Roberts, Ernest Theophilus, M.D., C.M.Edin., F.R.F.P.&S.Glasg., D.P.H.Camb., M.P.C., Hawkstone, 58, South Brae Drive, Jordanhill, Glasgow.
1903. Roberts, Norcliffe, O.B.E., M.D., B.S.Durh., Senior Assistant Medical Officer, Horton Mental Hospital, Epsom, Surrey.
1887. Robertson, Geo. M., M.D., C.M., F.R.C.P.Edin., M.P.C., Physician-Superintendent, Royal Asylum, Morningside, Edinburgh.
1908. Robertson, George Dunlop, L.R.C.S.&P.Edin., Dipl. Psych., Assistant Medical Officer, District Asylum, Hartwood, Lanark.
1916. Robertson, Jane I., M.B., Ch.B.Glasg., Dogleap, Limavady, Co. Derry.
1895. Robertson, William Ford, M.D., C.M.Edin., Pathologist, Scottish Asylums, 60, Northumberland Street, Edinburgh.
1900. Robinson, Harry A., M.D., Ch.B.Vict., 140, Edge Lane, Liverpool.
1920. Robinson, William, M.B., Ch.B., D.P.M.Leeds, Senior Assistant Medical Officer, West Riding Asylum, Wakefield, Yorks.
1911. Robson, Capt. Hubert Alan Hirst, M.R.C.S., L.R.C.P.Lond., Punjaub Asylum, India.

1914. Rodger, Murdoch Mann, M.D., Ch.B.Glasg. (The Anchorage, Bothwell, Scotland); Lunatic Asylum, Abbassia, Cairo, Egypt.
1908. Rodgers, Frederick Millar, M.D., Ch.B.Vict., D.P.H., Senior Medical Officer, County Asylum, Winwick, Lancs.
1908. Rolleston, Charles Frank, B.A., M.B., Ch.B.Dubl., Senior Assistant Medical Officer, County of London Mental Hospital, Banstead, Surrey.
1895. Rolleston, Lancelot W., *C.B.E.*, M.B., B.S.Durh., Medical Superintendent, Middlesex County Mental Hospital, Napsbury, near St. Albans.
1920. Roscrow, Cecil Beaumont, L.R.C.P.&S.Edin., Medical Superintendent, City Mental Hospital, Winson Green, Birmingham.
1888. Ross, Chisholm, M.D.Syd., M.B., C.M.Edin., 151, Macquarie Street, Sydney, New South Wales.
1910. Ross, Donald, M.B., Ch.B.Edin., M.P.C., Medical Superintendent, Argyll and Bute Asylum, Lochgilphead.
1899. Rotherham, Arthur, M.A., M.B., B.Ch.Camb., Commissioner under Ment. Defec. Act, Board of Control, 66, Victoria Street, Westminster, London, S.W. 1.
1906. Rowan, Marriott Logan, B.A., M.D.R.U.I., Medical Superintendent, Derby County Asylum, Mickleover.
1883. Rowland, E. D., M.B., C.M.Edin., 71, Main Street, George Town, Demerara, British Guiana.
1902. Rows, Richard Gundry, *C.B.E.*, M.D.Lond., M.R.C.S., L.R.C.P.Lond. (Director, Section of Mental Diseases), Tooting Neurological Hospital, Church Lane, Tooting, S.W.
1877. Russell, Arthur P., M.B., C.M., M.R.C.P.Edin., The Lawn, Lincoln.
1912. Russell, John Ivison, M.B., Ch.B.Glasg., Assistant Medical Officer, West Riding Asylum, Wakefield.
1915. Russell, William, *M.C.*, M.D., Ch.B., Dip.Psych., D.T.M.Edin., Senior Assistant Physician, Mental Hospital, Bloemfontein, S. Africa.
1912. Rutherford, Cecil, M.B., B.Ch.Dubl., Assistant Medical Officer, Holloway Sanatorium, Virginia Water, Surrey.
1907. Rutherford, Henry Richard Charles, F.R.C.S., L.R.C.P.Irel., D.P.H., St. Patrick's Hospital, James's St., Dublin.
1896. Rutherford, James Mair, M.B., C.M., F.R.C.P.Edin., M.P.C., Brislington House, Bristol.
1913. Ryan, Joseph Ernest Noel, B.A., M.D., B.Ch.Dubl.
1902. Sall, Ernest Frederick, M.R.C.S., L.R.C.P.Lond., Medical Superintendent, Borough Asylum, Canterbury.
1908. Samuels, William Frederick, L.M.&S.Dubl., Medical Superintendent, Central Asylum, Tangong, Rambutan, Perak, Federated Malay States.
1894. Sankey, Edward H. O., M.A., M.B., B.Ch.Camb., Resident Medical Licensee, Boreatton Park Licensed House, Baschurch, Salop.
- Sankey, R. H. Heurtley, M.R.C.S.Eng., 3, Marston Ferry Road, Oxford.
1873. Savage, Sir Geo. H., M.D., F.R.C.P.Lond., 26, Devonshire Place, London, W. 1. (*Late Editor of Journal.*) (PRESIDENT, 1886.)
1906. Scanlan, John J., L.R.C.P.&S.Edin., L.R.F.P.&S.Glasg., D.P.H., 1, Castle Court, Cornhill, London, E.C. 3.
1889. Scowcroft, Walter, M.R.C.S.Eng., L.R.C.P.Irel., Medical Superintendent, Royal Lunatic Hospital, Cheadle, near Manchester.
1911. Scroope, G., M.B., B.Ch.Dubl., Assistant Medical Officer, Central Asylum, Dundrum.
1880. Seccombe, George S., M.R.C.S., L.R.C.P.Lond., c/o Messrs. H. S. King and Co., 65, Cornhill, London, E.C. 3.
1912. Sergeant, John Noel, M.B., B.S.Lond., M.R.C.S., L.R.C.P.Lond., Medical Superintendent, Newlands House, Tooting Bec Common, London S.W. 17. (*Secretary South-Eastern Division since 1913.*)

1913. Shand, George Ernest, M.D., Ch.B.Aberd.; (Senior Assistant Medical Officer, City Mental Hospital, Winson Green, Birmingham).
Permanent address : 307, Gillott Road, Edgbaston, Birmingham.
1901. Shaw, B. Henry, M.D., B.Ch.R.U.I., Medical Superintendent, County Mental Hospital, Stafford.
1905. Shaw, Charles John, M.D., Ch.B., F.R.C.P.Edin., Medical Superintendent, Royal Asylum, Montrose.
1917. Shaw, John Custance, M.R.C.S., L.R.C.P.Lond., Medical Superintendent, West Ham Borough Asylum, Goodmayes, Essex.
1904. Shaw, Patrick, L.R.C.P.&S.Edin., Medical Superintendent, Hospital for Insane, Ballarat, Victoria, Australia.
1909. Shaw, William Samuel J., Major *I.M.S.*, M.D.Belf., M.B., B.Ch.R.U.I., Superintendent Central Asylum, Yeravda, Poona, India.
1920. Shearer, Christina Hamilton, M.B., Ch.B.Glasg., Visiting Physician, Lady Chichester Hospital, 11, The Drive, Hove, Sussex.
1909. Shepherd, George Ferguson, F.R.C.S., L.R.C.P.Irel., D.P.H., 9, Ogle Terrace, South Shields.
1900. Shera, John E. P., M.D.Bru.x., L.R.C.P.&S.Irel., Somerset County Asylum, Wells, Somerset.
1912. Sheridan, Gerald Brinsley, M.B., B.Ch.R.U.I., Valkenberg Mental Hospital, Cape Town, S. Africa.
1914. Sherlock, Edward Burball, B.Sc., M.D., D.P.H.Lond., Medical Superintendent, Darenth Industrial Colony, Dartford.
1914. Shield, Hubert, *M.C.*, M.B., B.S.Durh., Assistant Medical Officer, Gateshead Borough Asylum, Stannington, Newcastle-on-Tyne.
1877. Shuttleworth, George E., B.A.Lond., M.D.Heidelb., M.R.C.S. and L.S.A.Lond., 36, Lambolle Road, Hampstead, London, N.W. 3.
1901. Simpson, Alexander, *C.B.E.*, M.A., M.D., C.M.Aberd., Medical Superintendent, County Asylum, Winwick, Newton-le-Willows, Lancashire.
1905. Simpson, Edward Swan, M.D., Ch.B.Edin., East Riding Asylum, Beverley, Yorks.
1888. Sinclair, Eric, M.D., C.M.Glasg., Inspector-General of Insane, Richmond Terrace, Demain, Sydney, N.S.W.
1891. Skeen, James Humphry, M.B., C.M.Aberd., M.P.C., Medical Superintendent, Fife and Kinross District Asylum, Cupar, N.B.
1914. Slaney, Chas. Newnham, M.R.C.S., L.R.C.P.Lond., The Elms, Parkhurst, I.W.
1901. Slater, George N. O., M.D.Lond., M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, Essex County Mental Hospital, Brentwood.
1914. Smith, Charles Kelman, M.B., Ch.B.Aberd., Windsor Esplanade, Cardiff.
1910. Smith, Gayton Warwick, M.D.Lond., B.S.Durh., M.R.C.S., L.R.C.P.Lond., D.P.H., Assistant Medical Officer, Springfield Mental Hospital, Tooting, London, S.W. 17.
1905. Smith, George William, M.B., Ch.B.Edin., Chiswick House, Chiswick.
1907. Smith, Henry Watson, M.D., Ch.B.Aberd., Medical Superintendent, Lebanon Hospital for the Insane, Asfuriyeh, near Beyrout, Syria.
1899. Smith, John G., M.D., C.M.Edin., County and City Mental Hospital, Burghill, near Hereford.
1920. Smith, Maurice Hamblin, M.A.Camb., M.D.Durh., M.R.C.S., L.R.C.P.Lond., H.M. Prison, Birmingham.
1885. Smith, R. Percy, M.D., B.S., F.R.C.P.Lond., M.P.C., 36, Queen Anne Street, Cavendish Square, London, W. 1. (*General Secretary*, 1896-7. *Chairman Educational Committee*, 1899-1903.) (*PRESIDENT*, 1904-5.)
1913. Smith, Thomas Cyril, M.B., B.Ch.Edin., County Asylum, Gloucester.
1911. Smith, Thomas Waddelow, F.R.C.S.Eng., L.R.C.P.Lond., M.P.C., Assistant Medical Officer, City Asylum, Mapperley Hill, Nottingham.
1884. Smith, W. Beattie, F.R.C.S., L.R.C.P.Edin., 4, Collins Street, Melbourne, Victoria.
1914. Smith, Walter R. H., B.A., M.D., B.Ch.Dubl., Senior Assistant Medical Officer, County Asylum, Shrewsbury.

1920. Smyth, Geoffrey Norman, L.R.C.P.&S.Irel., Assistant Medical Officer St. Edmundsbury, Lucan, Co. Dublin.
1899. Smyth, Walter S., M.B., B.Ch.R.U.I., Assistant Medical Officer, County Asylum, Antrim.
1913. Somerville, Henry, B.Sc.Lond., M.R.C.S., L.R.C.P.Lond., F.C.S., Harrold, Sharnbrook, Bedfordshire.
1885. Soutar, James Greig, M.B., C.M.Edin., M.P.C., 20, Royal Parade, Cheltenham. (PRESIDENT, 1912-13.)
1906. Spark, Percy Charles, M.R.C.S., L.R.C.P.Lond., Medical Superintendent, London County Mental Hospital, Banstead, Surrey.
1875. Spence, J. Beveridge, O.B.E., M.D., M.Ch.Q.U.I., L.A.H.Dubl., Medical Superintendent, Burntwood Asylum, near Lichfield. (*First Registrar*, 1892-1899; *Chairman Parliamentary Committee*, 1910-12.) (PRESIDENT, 1899-1900.)
1920. Staley, Mildred Ernestine, M.B., B.S.Lond., Assistant Medical Officer, Stafford County Mental Hospital, Burton-on-Trent; Rosliston Rectory, Burton-on-Trent.
1891. Stansfield, T. E. K., C.B.E., M.B., C.M.Edin., Medical Superintendent, London County Mental Hospital, Bexley, Kent.
1901. Starkey, William, M.B., B.Ch.R.U.I., Medical Superintendent, Borough Asylum, Blackadon, Ivybridge, S. Devon.
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 1905. Whittington, Richard, M.A., M.D.Oxon., M.R.C.S., L.R.C.P.Lond., 1, Eaton Gardens, Hove, Sussex.
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 1911. Moeli, Prof. Dr. Karl, Director, Herzberge Asylum, Berlin.
 1900. Ritti, Ant., 68, Boulevard Exelmans, Paris. (*Corr. Mem.*, 1890.)

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1913. Adams, John Barfield, L.R.C.P.&S.Edin., M.P.C., 119, Redland Road, Bristol.
 1911. Buss, Howard Decimus, B.A., B.Sc.France, M.D.Bru.x&Cape, M.R.C.S., L.R.C.P., L.M.S.S.A.Lond., Assistant Medical Officer, Fort Beaufort Asylum, Cape Colony.
 1903. Dickson, Thomas Graeme, L.R.C.P. & S.Edin., The Merse Cottage, Bakewell, Derbyshire.
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 1917. Dunn, Edwin Lindsay, M.B., B.Ch.Dubl., Medical Superintendent, Berks County Asylum, Wallingford, Berks.
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Part I.—Original Articles.

A Brief Résumé of Freud's Psychology. By W. H. B. STODDART,
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St. Thomas's Hospital, London.⁽¹⁾

It is not without much hesitation and diffidence that I stand here to open your discussion on psycho-analysis, because I am merely one of Freud's disciples, and quite unworthy of assuming the rôle of an apostle of the psychology for which that great man—in my opinion the greatest psychologist who has ever lived—is entirely responsible.

I propose merely to outline some of the main features of this new psychology. Those of you who have no experience of true psycho-analysis will find them difficult of acceptance, not only on account of our universal tendency to misoneism from the very moment of our birth, but also on account of the intrinsic nature of psycho-analysis itself, which threatens to lay bare those mental characteristics in us which we are unwilling to admit, even to ourselves, and would stoutly deny.

Whatever is mentally painful, objectionable and unpleasant we like to "put out of our minds," as the saying is; but this does not accurately state what really happens.

An unpleasant memory is not thrown away into space, so to speak, for it can be revived by such processes as hypnotism and psycho-analysis. It is still in the mind, but it is driven deeper into some recess, where we hope it will remain dormant. As an example, my income-tax papers are associated with the unpleasant experience of paying large sums of money with nothing personal to show for them, and it used to be my custom unintentionally to lose them. Now, however, I send them to an accountant every year; but this does not end the difficulty, because

⁽¹⁾ Opening paper, discussion on psycho-analysis, etc., Annual General Meeting, Buxton, July 28th, 1920.

I invariably forget his name. It is Harper, so I have now devised a mnemonic to bring the name into association with the notion of being robbed, *viz.*, "Harpy."

This mental mechanism of pushing unpleasant thoughts into deeper recesses of the mind is known as "repression." It is an automatic mechanism to protect us from intolerable thoughts; yet we have to recognise that not every unbearable memory is repressed. For example, we never forget the death of a loved relative; but we do tend to forget many occurrences associated with the death whose recall would lead by association to the painful incident, and even things which might revive the memory of such occurrences. In this way a gradually increasing group of thoughts may become repressed. Any such repressed constellation of ideas is known as a "complex."

Now life is not easy. Everyone of us has not one complex, but many; and we have to recognise that there is a region of the mind consisting of such complexes.

This region is called "the unconscious." I use the word "region" for convenience, not in any anatomical sense. The unconscious contains all those memories, thoughts, desires and other affects which are so displeasing to or inharmonious with the content of conscious thought that they are completely banished from it, so much so that we are quite unable to recall them, no matter how hard we try. Indeed their place in the conscious mind, which we briefly call "the conscious," is taken by their exact opposites.

A repressed and therefore unrecognised desire for a thing is replaced in consciousness by a dread of it; a repressed and therefore unrecognised and unconscious love of a person is replaced in consciousness by a hatred of him.

An active demonstration of such conscious dread or hatred is called a "reaction." An unconscious desire to play with dirt in any form or to commit some act which would consciously be regarded as "dirty" is evidenced by scrupulous cleanliness and tidiness. In our asylums we have many patients who would wash their hands fifty times a day if they were allowed to do so. This is a "reaction" against an unconscious desire to do some "dirty" act, the nature of which varies from patient to patient.

On the other hand, it must not be supposed that a desire which is unacknowledged and has been banished from the conscious into the unconscious lies dormant. On the contrary, it is constantly striving for recognition and gratification; but as the conscious will not allow this, such gratification has to be achieved in some distorted guise, unrecognisable by the conscious.

This is accomplished in one or more of three different ways. If the individual remains normal the complex is turned to account in some

useful, social, academic, moral, æsthetic or conventional activity. For example, an abhorrent unconscious homosexual trend may be utilised in an interest in developing educational establishments and clubs for persons of the same sex as the individual. An unrecognised desire to exhibit one's body to others may be sublimated into sea-bathing in public or into striking modes of dress, or into speaking in public or placing oneself in the limelight in other ways on every possible occasion. The desire to look upon the naked bodies of others may be sublimated into artistic interests or into that boundless curiosity which is the basis of all research.

Another mode of gratifying unconscious wishes is by dreams during sleep in normal people or by day-dreaming in hysterical patients. The difficult study of the interpretation of dreams plays an important rôle in psycho-analysis, and requires a great deal of experience.

If the patient does not remain normal, he gratifies his complexes by the creation of symptoms. Every neurotic and psychotic symptom is the fulfilment of an unconscious wish, and the same may be said of all dreams. Neuroses, psychoses and dreams are fundamentally the same, the only difference being that the neurotic or psychotic lives his dream. Owing, however, to the conscious refusal to admit the existence of desires which are gratified in this way, the wish-fulfilment never appears in an undisguised form. It is always greatly distorted in both dreams and symptoms. If the wish-fulfilment is not disguised, the wish must be regarded as conscious or very nearly conscious.

There is not enough time to explain the methods or mechanisms of this disguise, so we proceed to some other items in Freudian psychology.

The chief one, which ought therefore to have been mentioned earlier, is *psychical determinism*. According to the Freudian school, every thought, action, memory or psychical event of any kind is rigorously determined by the circumstances of the moment *plus* the whole of the individual's previous experience of life. There is no such thing as "chance" in mentation. If you forget an appointment, misplace something, say or write the wrong word, break some treasure which consciously you value, cut a friend or fall downstairs, there are reasons—usually unconscious—for such occurrences. Similarly with symptoms: if a patient is oblivious of his surroundings and lives in a world of his own, regards himself as an unworthy person, sees snakes attacking him, or hears bells ringing, makes a false accusation or has a fit, there are reasons, and, in view of his experience of life, such symptom and nothing else is bound to happen. Let me say here that, when I speak of the experience of life, I mean the whole life, including the day of the patient's birth. The terrible experience of birth is not forgotten so much as most people imagine. The remembrance of it is frequently

revived in dreams, and I have had two patients who consciously, though vaguely, remember being born.

This brings us to another item of Freud's psychology. He holds that forgotten infantile desires and interests remain permanent throughout the whole of life, and that many adult activities owe their energy to primitive infantile impulses which lurk hidden behind them. The infant has all sorts of interests which, though innocent enough in a child, would be regarded as dirty or immoral in an adult. If these remain unsublimated, they play an important *rôle* in the formation of neurotic or psychotic symptoms in after life.

Moreover, the child's psychical relationship with his father and mother or their surrogates and with his brothers and sisters is a pattern for its relationship with people outside his own family when he grows up, and any neurotic or psychotic manifestation among members of his own family, especially of the father or mother, has a profound effect upon the mental development of the child. When the offspring of a psychotic parent becomes insane we must not be satisfied, as in the past, with "heredity" as the most potent ætiological factor, for the parents can affect their children in other ways than by heredity; and I cordially recommend you, by way of a beginning of the study of psycho-analysis, to encourage your patients to talk to you confidentially about their own parents, especially in relation to themselves, the views they have held about them at various stages of their life-history and so forth.

Another important discovery of Freud concerns the affective processes—emotions. An emotion or affect arises in association with some particular situation, incident or thing; but it appears that it is possible for the affect to be divorced from the original situation, incident or thing, and to become attached to another somewhat similar situation, incident or thing, or even to float free, as it were, for a time, waiting for some situation, incident or thing.

By way of example, let me anticipate another problem—the sexual one. Biologically, as regards young females, the natural affect towards the male genitalia is desire; but for reasons which will be discussed later she refuses to admit to herself that she has any sexual desire. It is therefore repressed into the unconscious and replaced in consciousness by its opposite, *viz.*, fear, which is exhibited quite innocently in many ways.

[Dr. Stoddart here gave examples which made his meaning clear.]

Lastly I must make some reference to that part of Freud's psychology which has aroused the liveliest opposition, *viz.*, the importance he attaches to the sexual instincts as ætiological factors in the development of the neuroses and psychoses. This opposition is partly due to his recognition of the beginnings of the sexual instincts in even the earliest years of childhood. For this among other reasons he has been

accused of extending the meaning of the word "sexual," but he has not really done so; he has merely recognised certain infantile activities to be of a sexual nature because they would be regarded as sexual by everybody if they occurred in an adult. Freud would be the first to admit that such activities are perfectly innocent in a child and that it does not realise their sexual meaning; nevertheless they occur, and Freud merely discerns in them the earliest beginnings of sexual life. I have had many patients, especially females, who masturbated every night into their late teens, usually because they had found that masturbation was a good hypnotic, but without realising that it had anything to do with sex. When they did realise this fact they ceased the practice.

But the chief reason for opposition is the fact that the topic of sex is taboo.

Sexual indulgence is regarded as a crime, except in legitimate wedlock, and sexual topics are far more banned than those of murder, theft and other non-sexual crimes, despite the fact that engagements and marriages are of the greatest interest to the very people who ban more intimately sexual topics most.

When we come to think of it, this is a very remarkable characteristic of the human race. Biologically there are only two reasons for the existence of any animal or plant:

- (1) Self-preservation (including self-nutrition) and—
- (2) Reproduction of the species.

Social custom permits contemplation of and indulgence in the first, but it opposes even the slightest reference to the second so strongly that most parents have in the past striven to keep their children in total ignorance of the subject, so that many brides know nothing whatever about it.

Why is this? Why should sexual topics come under the social ban more than any others? The explanation is to be found in certain data respecting the sexual perversions, which are many. There are homosexualities of numerous kinds, masochism and sadism, fetichism, masturbation with its fundamental complexes (auto-erotism and narcissism), and many others.

These perversions are much more common than is usually supposed. Havelock Ellis, who is probably the greatest authority in this country on the subject, states that 5 *per cent.* of men and 10 *per cent.* of women are consciously homosexual, but psycho-analytic experience reveals the fact that there are an enormous number of people who are homosexual, yet do not know it. Homosexuality, being to them an intolerable idea, is automatically repressed and is therefore unconscious. For example, many neurotics and all alcoholics and people addicted to drug-taking are repressed homosexuals. I think we may therefore conclude that at least 25 *per cent.* of the population is homosexual.

This is only one sexual perversion, but contemplation of the fact that there are many other perversions distributed among the rest of the population naturally leads us to infer that most people must be sexually perverted in one way or another, either consciously or unconsciously. Psycho-analytic experience confirms this conclusion, for it is found that apparently normal people have some kind of sexual perversion, either self-acknowledged or repressed, usually repressed.

We are thus led to Freud's conclusion that nobody is quite normal sexually; and since very few people would be willing to acknowledge any abnormality, sexual matters in general become taboo to such a degree that the repression achieves the force of an inborn instinct.

This is the fundamental reason for the fact that the unconscious consists mainly of sexual thoughts and desires and also for the instinctive opposition to psycho-analytic investigation. Prof. Clifford Allbutt, in his recent Presidential Address to the British Medical Association, openly confessed that he was thankful that it did not fall to his lot "to seek for pearls in that sty," and although he prepared a public criticism of the method, he did not even take the trouble to learn anything about it, as we shall see later—a very good reason for the necessity of his having recourse to such unscientific language by way of criticism.

Let us not in this Association be led away from the path of scientific investigation by sentimental objections based on our own psychical make-up, but let us at least be willing to admit that our patients, like ourselves, have unconscious trends which they are unwilling to acknowledge to themselves, the only difference being either that their unconscious trends are stronger than our own, or that some experience has dragged them into or near to conscious thought, so as to produce a mental conflict between their opposing conscious and unconscious desires.

To discuss the development of the normal sexual instinct and its perversions would be too extensive a task for an introductory paper like this, but you will hear something on this matter from Dr. Stanford Read and Dr. Rees-Thomas. All that I need say now is that Freud has pointed out that the germs of all sex perversions already exist in the infant, which he has therefore termed *polymorph perverse*.

I had not intended to say anything about the *technique of psycho-analysis*, but when such a pundit as Sir Clifford Allbutt arraigns the method for being contaminated with *militarism* and *ecclesiasticism*, by which he implies a method of dominating the patient by means of suggestion and a method of relieving his mind by getting him to confess his past misdeeds, it becomes necessary to counter such misrepresentations.

There is no domain of medicine in which suggestion is more scrupulously avoided than in psycho-analysis. You must tell the

patient absolutely nothing, while he tells you everything. All that the analyst does is to instruct the patient in the psycho-analytic method and to keep bringing him back to the point, whose discussion he (the patient) has initiated himself, until he (the patient) has arrived at some conclusion respecting the deeper meaning of his symptom, his dream, his revived memory or whatever it may be. Some authorities have called the departure from this principle "bad psycho-analysis," but really it is not psycho-analysis at all to guide the patient in his thoughts or to advise him as to a course of conduct. The true psycho-analyst avoids both, even when asked for advice.

With regard to the confessional idea, it is perfectly true that the patient tells the analyst everything that occurs to his mind. It is not, however, the confession of troublesome conscious thoughts that brings relief, but the discovery of previously unrecognised and therefore unconscious memories, trends of thought and desires.

I have tried to be brief, but psycho-analysis is a very big and very difficult subject, the mere fringe of which I have attempted to show you during the few moments at my disposal.

In conclusion, I must make an apology. The title of this discussion is "Psycho-analytic Teachings as Illustrated in the Psychoses," whereas I have made no *special* reference to the psychoses, and I have, moreover, presented only a very elementary account of Freud's psychology, a great deal of which has already become common knowledge among the laity. I offer as my excuse that this is, so far as I am aware, the first occasion on which psycho-analysis has been seriously discussed at a meeting of this Association, and that psycho-analytic doctrines are exactly the same for the neuroses, psycho-neuroses and psychoses.

From a psycho-analytic point of view the psychoses are the most difficult group. The manic-depressive psychosis is the most hopeful; it can be tackled between the acute attacks of mania or melancholia, but of course not during them, because the patient is incapable of co-operation. Paranoia and paranoid states can be treated psycho-analytically only in the very earliest stages when the patient presents himself as a neurasthenic and the neurasthenic symptoms predominate over the paranoid symptoms, because an established paranoiac believes that there is nothing the matter with him and therefore refuses all treatment.

And with regard to dementia præcox, the aim of the malady appears to be to retreat from the world of reality. Here, again, the co-operation of the patient cannot possibly be obtained, but there are a very few cases of very early dementia præcox on record which have been cured by psycho-analysis.

Practically the only asylum cases which lend themselves to this method of treatment are those of anxiety hysteria, usually diagnosed as

melancholia, but it is very doubtful whether psycho-analytic treatment can ever find its place in asylum work, because of the fatal interruption of this highly scientific work by administrative duties.

Homosexuality.⁽¹⁾ By C. STANFORD READ, M.D.Lond., Physician to Fisherton House, Salisbury.

By the majority of individuals, and even of medical men, homosexuality has simply been regarded as a disgusting perversion which merits no further interest or investigation. This disgust and revolt of the moral sense is explained by Freud as due in great part to the existence in the ordinary mind of a homosexual component of the sex instinct, which finds indirect expression in condemnation of homosexuality in others, in the same way as the repression of the sexual instinct in the prude expresses itself in the condemnation of normal sexual activity. This idea seems to be confirmed by the great tolerance of homosexuality we see in some countries where sex repression is also much lessened. We must bear in mind that man is not the purely reasoning individual he deludes himself he is, and it is certain that he is largely swayed by unconscious emotional forces which warp his thought and action. The student of science is by no means an exception, and we should do well when new theories come before us, and controversy is apt to be rife, to dip thoughtfully into the chapters on the psychology of belief.

To the sociologist the study of this perversion is of importance because it is biologically unproductive, but also to the mental physician because knowledge of every abnormality is necessary for the understanding of the human problems with which he has to deal ; and this is specially so when modern research has demonstrated homosexuality to be a factor in the motivation of thought and action little dreamt of a while ago.

The present discussion on those psycho-analytical principles which specially come within the domain of mental medicine is evidently a sign that an increased interest is being taken in Freudian doctrines ; and those of us who cannot help but feel that some glimmer of human understanding of the essential meaning of psycho-pathological reactions has come about through their study trust that it will stimulate many to be dissatisfied with the old, more or less purely descriptive psychiatry, to look upon mental disease from a more psycho-biological point of view, and see if some, at any rate, of the psycho-analytical theories are not confirmed.

⁽¹⁾ Read at the Annual General Meeting, Buxton, July 28th, 1920.

Homosexuality has been found through psycho-analysis to be the main factor in the causation of certain mental abnormalities, which for the first time have been thereby placed on a more satisfactory and scientific pathological basis. In its conscious form, where it is often carried into overt action, it is far more prevalent than is usually supposed, and I have a vivid recollection of how my eyes were opened in this respect when I started psycho-therapeutic practice, and had personal confidences given me of an intimate nature. At the outset one must differentiate the passive homosexual from the active type. The former is somehow developmentally abnormal and often has distinct feminine characteristics, while the latter, who is greatly in the majority, has acquired in the process of mental growth the condition which may therefore be regarded as a form of neurosis.

I must, of course, assume that all those who are really interested in mental problems have intelligently read Freud's principal works, so that there is no necessity here to dwell upon his fundamental psychological doctrines, and I need only remind you of some of the points in his sexual theory, which has thrown a flood of light upon much that previously was quite obscure. Freud holds that the sexual instinct is not a new motive force which appears in a fully-fledged form at puberty, but a synthetic product formed from the combination of a number of partial impulses which were present throughout childhood. During the first period the child's sexuality is believed to centre in certain areas of its own body, and later it is its whole unified body which is the source of its regard. This latter is the stage of narcissism or self-love, which plays a very important part in the development of our later life. The tendency at this period, then, is for the child to take itself as its object-love, and to love itself in others who have similar genitals. Subsequently the love passes over to the opposite sex. Be it understood, however, that the sexuality here is only infantile in type, and must not be taken in an adult sense. The psycho-analytic theory is that homosexuals are only more strongly fixed than other people in this narcissistic stage, genital organs like their own being always the essential element for their love. It is true that some analysts have put forward other theories, alleging that the narcissism is a consequence of the repression of a mother-ideal, or that homosexuality is only a refuge from the opposite sex, but in this brief exposition I cannot dwell upon such points.

The homosexual component has therefore its germ in all mankind, and finds its outlet normally in a sublimated form in friendships and companionship. Those, however, who are too prematurely fixed or arrested in the evolution of their sexual dispositions are exposed to the danger that a flood of libido which finds no outlet may, through failure in social life, strong outbursts of sexual needs, or through disappointment in the opposite sex, regress to this earlier form of gratification. Long before

I had any knowledge of psycho-analysis I had thrust upon me the mental conflicts that resulted from a temporary regression. A mental conflict nearly always ensues because homosexual desire is so abhorrent to the average ego-ideal, and so much so that in the majority of cases the desire is never allowed to enter consciousness. What, then, may be the final outcome of the failure of repression of a latent homosexuality? Firstly, it may be that the desire finds itself little in conflict with the personality, and that gratification is fulfilled, with or without subsequent reproach to the self. Secondly, repression may again be successful, the conflict ended and normal heterosexual feelings resumed. Thirdly, the energy attached to the impulse may be sublimated into useful social channels, and lastly, in the predisposed the conflict may result in mental disorder. Those psycho-analysts who have had large experience find that homosexuality may thus be a responsible factor in many neurotic maladaptations, of which psychic impotency is an important one; that it is the pathological basis of paranoiac states, and is mainly responsible for chronic alcoholism and many drug habits.

Freud, even as far back as 1895, traced the connection between paranoia and latent homosexuality, and since that date his theory has been amply confirmed by Ferenczi, Jung, Bleuler, Maeder and others. There is the possibility, too, that the same basis may account, to some extent, for certain minor paranoid states where the individual shows a definite maladaptation to his environment in an analogous way to a paranoid dement, but without any noticeable signs of deterioration. In such cases it has been found that the conditions arose from homosexual trends which failed in being successfully repressed, and in which the intolerable idea conflicts with the personality so that the psychological mechanism of projection results. During the late war I found that paranoid states were very common among the mental disorders manifested, and I have put forward the ætiological hypothesis that the herding of vast numbers of men together may have aroused a latent homosexuality in many.

The mechanism of projection is usually one of defence. What is thereby perceived as of ex-psychic origin stands for trends which are painful to the conscious personality. The individual does not then recognise them as manifestations of his own tendencies. Repression would banish them entirely from consciousness, so that projection may be looked upon as an effort at repression which is only partially successful. The paranoiac makes special use of this mechanism. The desire that is so unbearable is first negated and then returns from its object in the form of a perception from without. Passive resistance within, conceived as a hostile force from without, is not only characteristic of persecutory delusions, but is quite a general form of reaction. Children personify and endeavour to punish inanimate objects on which

they injure themselves. This projection mechanism is common enough in our every-day life, and latter-day psychology teaches us that the same mental processes may be seen at work in the so-called normal states as in the disordered ones.

Thus psycho-analysis would explain the delusions of persecution, jealousy, erotomania and grandeur seen in paranoia by the following psychological mechanisms. The unbearable idea "I love the man" is negated, becomes "I do not love him," and this by projection forms the persecutory delusion, "He hates me." Delusions of jealousy will come about from the substitution of "I do not love him" by "She loves him." Erotomania would be caused by the substitution of "I love him" by "I love her," and by projection this becomes "She loves me." Finally, if there is a total negation—"I do not love anybody," which is equivalent to "I only love myself"—delusions of grandeur follow.

By means of his delusions the paranoiac builds up a world of his own in which he feels he can live, and therefore the Freudian school would look upon these symptoms of the disorder as attempts at a biological reconstruction.

The intimate relation existing between alcohol and the paranoid states is patent to every psychiatrist, and the psychological connection between the two is close, in that alcohol tends to destroy sublimation and aids regression, and in that way may set free early trends of which homosexuality has been shown to be a common one. That a homosexual impulse tends to be released by alcohol is illustrated by the fact that excessive drinking mostly occurs only in the presence of the same sex and by the affectionate behaviour between drunken men which is so often seen. Alcoholism is not really the basic cause of a paranoiac state, but in the insoluble conflict between a conscious heterosexual and repressed unconscious homosexual desire the individual flies to alcohol as a refuge. Many habitual drug-takers are said to be much in the same position, as analysis has tended to show a similar basic factor.

The foregoing is only a bare *résumé* of the *rôle* that homosexuality has been found by psycho-analysis to play in the production of abnormal mental reaction. To a large number the evidence may seem unconvincing, but it is possible that a deeper study of psycho-analytic work and a practical investigation into individual cases will bring added belief to the sceptical. Let us recollect that these findings are the result of long and painstaking analytic research, and are not the wild speculations of irrational visionaries. Every observant psychiatrist must have been struck by the common sexual content of the hallucinations in paranoiac cases and those of so-called alcoholic hallucinosis. In man especially the "voices" accuse the patient of homosexual practices or desires and not of heterosexual ones, because the former are only in conflict with

the personality and so dissociated. Confirmation, too, is found in dreams, and often baldly so without much or any distortion.

Let us then not unscientifically assume the falsity of these Freudian conclusions without good reason, for any theory which throws light upon the essential meaning of mental symptoms must be to some extent welcome. Psycho-analytical principles have in this way revolutionised so much of our psychiatric work, in that in the wards, instead of regarding our patients' utterances and actions as grotesque because emanating from a disordered brain, we see our patients as individuals taking refuge from reality, building up a world of their own, and to all their strivings some important significance is attached if only we have the psychological eye to read.

Sadism and Masochism. By W. REES-THOMAS, M.D., M.R.C.P.
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SADISM is conceived as including anything from an impetuous attitude towards the sexual object to the stage in which sexual gratification is exclusively dependent upon the complete subjection and ill-treatment of the sexual victim.

Masochism, on the other hand, includes mere subjection to the sexual object at one extreme and the suffering of physical or mental pain as a condition of sexual pleasure and gratification at the other.

In this short discussion sadism and masochism are taken in their broadest sense.

The wide-spread occurrence of sadism and masochism is such that we see its effects and workings in diverse forms. Ivan Bloch refers to the "occurrence of sadism and masochism as affecting mankind in the mass—a fact of particular importance. To give some examples: Campaigns, gladiatorial combats, man-hunts, beast-baiting, bull-fights, sensational dramas, public executions, inquisition and witch trial, lynch-law as practised to-day in North America, in the behaviour of the crowd of onlookers at the former punishment of the pillory, especially also in revolutions, of which to-day once more we have the most horrible example in Russia, in the primeval custom of marriage by capture, in cannibalism and the scourges of the middle ages, the horrible 'satanism' of the same period, and asceticism and martyrdom. These facts suffice to prove that among all nations sadism and masochism in all the forms we still observe to-day were most widely diffused; and to prove that they arise from certain instincts deeply-

(¹) Paper read at the Annual General Meeting, Buxton, July 28th, 1920.

rooted in the soul of the people, the existence of which, even to-day, manifests itself everywhere."

But cruelty impulses, active and passive, are not necessarily abnormal. They find their normal counterpart in the masterly attitude of the male and the passive attitude of the female. This attitude may have arisen from the one-time necessity for capture of the female by the male, and this is still reflected in certain old customs in our own kingdom. In the early seventies it was still the custom in certain parts of Wales for the bride to set out on horseback on her wedding morn for an unknown destination. The bridegroom gave chase, and he was obliged to capture her and bring her back before the wedding ceremony could take place.

It is interesting to note that among certain aboriginal tribes of Southern India the word for war means the struggle for bullocks, and that amongst these tribes the purchase price of a wife is always paid in bullocks.

In the animal world we find many instances of ill-treatment of the female by the male as being a normal occurrence during courtship. Perhaps the best examples would be the cat and the horse.

In the present state of our knowledge it is impossible to trace the cruelty impulse to its origin. We can only indicate certain possible sources and certain events which may be factors in reinforcing and making dominant that tendency. The baby is conscious of its power over the external world, and it makes every effort to maintain this sense of power. Hence every event which is not pleasing is subject to aggression until the child learns its limitations—that is, acquires its "sense of reality."

Pain we conceive as a form of intense emotional excitement. In its original form it appears to the child as a direct negation of its "sense of power." The infliction of pain on others is an attempt on the part of the child to maintain its omnipotence. And this constitutes cruelty because the act is unconditioned.

This attitude of the child is a source of pleasure. Freud has expressed the opinion that possibly the association of cruelty with the libido is primary. On the other hand he doubts whether the passive cruelty tendency appears as primary, and states that it is often recognisable as arising from the active cruelty impulse through repression.

The infliction of pain on others will retain its actual pleasure component until the child later develops the impulse to suspend action which is likely to cause, or before it causes, pain to others. And this development of sympathy occurs as a secondary impulse, and until it has effectually appeared there is always the danger that the connections between cruelty and the erotogenous impulses formed in early life cannot be broken.

The influence of muscular activity on sexual excitement has been

pointed out by Freud. It is certain that movement is a source of pleasure to the child as it is to the adult.

During the excitement of a contest it is common for children to experience a pleasurable feeling in the genital zones.

In both intense muscular activity and sexual excitement there is that feeling of intensity which may cause overflow to other impulses. If this connection between exercise and sexual activity acquires some importance to the individual it may be a factor in the later formation of sadistic impulses.

The sexual act, if witnessed by very young children, must be regarded by them as a contest in which there is overpowering on the one hand and submission on the other.

The following case is of interest in this connection :

C. W—, æt. 19. A vagrant. When first seen he was subject to outbursts of excitement with aggressive tendencies towards the attendants in charge of him. These occurred about once a fortnight, and in the intervals he was always solitary and depressed. He frankly admits that he is a homosexual, and is a vagrant mainly for the purpose of satisfying his homosexual desires. During a short analysis I was able to bring out the following memory : At the age of two and a-half to three years he witnessed normal coitus between his parents, and during childhood he was much disturbed by the knowledge that other men beat his mother. He now realises that his mother was a prostitute. The recall of the scene between his parents produced an attack of acute mania lasting six to eight hours, during which time I had to seclude him in a padded room.

Since that time he has been much more cheerful and has not during five months attacked his attendants. His homosexual tendencies remain and I have not been able to attempt further analysis.

It would appear as though his aggression represented the conflict with his father. Further analysis may modify this opinion, but it certainly shows that the cruelty impulse can acquire force from the child's too close association with the intimate life of his parents.

During the course of the development of the sexual organisation we pass through what Freud terms the pre-genital stage, *i.e.*, the stage in which the libido seeks an object before the primacy of the genital zones is finally established. One phase of this stage is known as the sadistic-anal erotic. In this we have hate or cruelty associated with anal eroticism. This association may occur as the result of training. The pleasure that the child seeks in its own excreta and its attempt to secure greater pleasure by retention is often frustrated by the mother or nurse. Thus the child comes into conflict with those around it and it expresses its attitude in hatred and defiance. Ernest Jones points out that there is an inherent connection between hate and anal eroticism in the genesis of the compulsion neuroses. Federn, quoted by Jones, lays special stress on the anal erotic sensations themselves as being associated with the earliest evidences of sadistic wishes in cases of sadism analysed.

The other pre-genital sexual organisation which is important to this discussion is the oral or cannibalistic. The mouth is originally con-

nected with the taking of nourishment, and this source of pleasure becomes differentiated during development from the sexual activity. In this pre-genital stage the sexual activity is not yet separated from the pleasure associated with the taking of nourishment.

Fixation with object-formation will explain the sadistic biting which is so common. As Freud so well expresses this, "The object of one activity is also that of the other ; the sexual aim consists in incorporating into one's own body of the object ; it is the prototype of that which plays such an important psychic *rôle* as identification." This desire to incorporate into one's own body the sexual object is so well seen in the expression of the lover, "I could eat her !" Here we find expressed in language the association between the nutritional and sexual activities.

It is easy to understand how the failure of the nutritional organisation to become separated from the sexual would be a potent source of sadistic tendencies in our sexual life. From the psychic attitude of the normal lover to that of the sadist is but a small step.

A source of the passive cruelty impulse is found in the sexual excitement associated with irritation of the skin of the gluteal region. The pleasure which some children take in whipping is well known. The following passage is quoted from Freud: "The sexually exciting influence of some painful affects, such as fear, shuddering and horror, is felt by a great many people throughout life, and readily explains why so many seek out opportunities to experience such sensations provided that certain accessory circumstances (as under imaginary circumstances in reading or in the theatre) suppress the earnestness of the painful feeling. If one might assume that the same erogenous action also reaches the intensive painful feelings, especially if the pain be toned down or held at a distance by a subsidiary determination, this relation would then contain the main roots of the masochistic-sadistic impulse into the manifold composition of which we are gaining a gradual insight."

The following case may possibly throw some light on the significance of self-inflicted pain :

A mental defective, æt. 16, mental age 8, has, during the past four years while under detention at an industrial school and a State institution, on numerous occasions inflicted wounds on his own arm, neck and body, and on one occasion has attempted suicide by drowning. These attempts always follow reprimand by those in charge of him. His object is to spite the attendants and get them into trouble, and self-mutilation is always associated with "getting home to his mother." This latter reason is always given when he is questioned. He admits that this thought, which is uppermost in his mind, has no meaning to him, as he realises that good behaviour only leads to home. Partial analysis revealed the fact that during his youth he was constantly being reprimanded and beaten by his father, and on one occasion his skin was broken and he bled profusely. Still, as a young child he welcomed these thrashings because it was usually the occasion of a quarrel between his father and mother in which his mother took his part. His mother frequently talked to him of the cruelty of his father towards both. The patient has never attempted self-mutilation when at home. It is possible that this

self-injury represents the conflict with his father, and by this he places himself into the position in which he obtained most sympathy from his mother. Hence the origin of the thought that by injury to himself he would get home to his mother. It is distinctly masochistic in character. His sadism is shown by the fact that when a boy he was constantly teasing, chasing and ill-treating girls.

It would appear that sadism and masochism always exist side by side, and where sadism is found there are symptoms of masochism also. The prominence of one or the other represents only the predominating sexual activity. In connection with this I might refer again to Freud's opinion that possibly masochism merely arises from sadism through repression.

There are two other tendencies which show cruelty components. I refer to the childish desire for exhibition and its opposite, sexual curiosity. In exhibitionism we see the active cruelty impulse in the desire to give offence, and the passive element in the desire to acquire a reputation and the submission inferred. Exhibitionism in its various forms is so common among the insane that I need give no instances.

The use of obscene language has its sadistic element in the wish to offend. It is a verbal sadism, and its occurrence in the psychoses is more than common. Who can walk through the wards of an asylum without being greeted with abusive terms which are intimately intermingled in meaning with sexual matters and ideas?

When the cruelty impulse is present to consciousness and is of abnormal force relative to the individual it represents the perversion. But this abnormal sexual tendency may manifest itself by symptoms which are the converted expression of the perversion, but which are not recognised by the conscious mind as representing the cruelty impulse.

These symptoms form part of the symptom-complex of the psycho-neuroses and psychoses.

I quote the following case from Brill :

B—, æt. 39, suffering from a compulsion neurosis. He was obsessed by doubts and phobias which referred to definite ideas about killing people. The most prominent factor in his infantile sexuality was the component of cruelty. B— was taught to use firearms at a very early age. His greatest pleasure up to the age of nine or ten years was shooting birds, squirrels and rabbits. At the age of puberty he became very sympathetic, and one day after shooting a squirrel he suddenly experienced feelings of compassion and remorse. Since then he found it hard to go out shooting. When his neurosis developed at the age of eighteen he also began to suffer from constipation, which has continued for fifteen years. No medication would relieve him until he accidentally discovered that the following process gave him a movement of the bowels. He once played with a spool of cotton on which was a picture of a child. He rolled it, and when the child's picture came his way he stuck a pin into it. After five minutes of such play he would have a movement. He then resorted to this practice, which he modified from time to time until he was cured. He carried a number of long pins which he sharpened from time to time, and every morning he drew the picture of a girl and thrust the pins into the region of the heart. When he was busy he could simply draw a target on paper and throw his pen at it, imagining it was a girl.

Sometimes he imagined himself fighting, which gave the same result. On one occasion while throwing his pins at a picture one of them fell through the window into the garden, and as children were wont to play there he soon became obsessed with the idea that one of the children might swallow the pin and die. This was the first obsession of this kind and it continued in different forms.

In the transformation of love into hatred which is characteristic of paranoia we see the union of the cruelty impulse with the sexual desire. In the delusions of persecution and in the attitude of the patient we see the sadistic and masochistic elements.

Ferenczi holds that active homosexual desire is a true obsessional condition, and has for its basis fixation in the sadistic anal-erotic stage.

He quotes the following case :

A patient, whenever he felt himself insulted by a man, especially his superior, had at once to seek out a male prostitute; only in this way was he able to save himself from an outburst of rage. The supposed "love" for a man was here essentially an act of cruelty and revenge.

Hence we see that active and passive cruelty may be recognised as almost universal, and acts in greater or lesser degree in influencing and colouring the sexual abnormalities and psychoses.

Criticisms of Present-day Psycho-analysis. By WILLIAM BROWN, M.A., M.D.Oxon., D.Sc.Lond., Reader in Psychology, University of London (King's College), Director of Psychological Laboratory (King's College).⁽¹⁾

IN dealing with the subject of psycho-analysis I do not desire to be critical for the mere sake of criticism, but with regard to the work of Freud I might begin with a word of personal explanation.

As long ago as 1912 I was interested in Freud's views, and was reading some of his work in the original, especially his *Traumdeutung*, on which I published articles in the *Lancet*.⁽²⁾ Ever since that date I have spent a great deal of time in endeavouring to test the various statements which he and Jung have made and set forth. No doubt many of you now feel inclined to ask me, "Have you yourself been analysed?" because that is considered to be a pre-condition to being able to test Freud at all. In reply I may say, firstly, that I dream very copiously every night; in fact, I do not know a night on which I have not dreamt, and for many years I have been endeavouring to analyse those dreams. Secondly, I have handed myself over for psycho-analysis, not to Freud or Jung, it is true, but to someone who is a good psychologist and intensely interested in analysis. And I have thus discovered

⁽¹⁾ Read at the Annual General Meeting, Buxton, July 28th, 1920.

for myself the extraordinary difference between self-analysis and analysis conducted by somebody else ; the way in which unconscious content of thought sprang to the surface and overwhelmed one, so to speak, was a new and surprising experience, so that one had to think things over very carefully, and decide whether the ideas and feelings which came from the depths were true or false, whether they were mere suggestions, or real mental entities which had been lurking in the unconscious. And I can say that most certainly many of them were mental processes which must have been lurking in the unconscious and reached their full validity when they arrived at the surface of the mind.

With regard to the Freudian system of psychology I speak as a psychologist, and I will try to represent the point of view of modern psychology in reference to this portent in the psychological world. I think no one who has studied Freud with closeness would refuse to admit that he is one of the greatest of psychologists. That he is the greatest psychologist who has ever lived (as Dr. Stoddart has said) is a somewhat big claim to make, because in Plato and Aristotle we have men who were, from the point of view of the state of knowledge in their time, transcendent in their powers of psychological analysis, and also of philosophical synthesis, to an extent which one does not find in Freud. And that brings me to what I regard as a very important matter, namely, the relationship between the psychology of thought or cognition, in which these ancient Greek philosophers were greatly interested, and the psychology of emotion and feeling, in which modern psychology is becoming more and more entangled. There seems to be a tendency—perhaps an excessive tendency—in modern times to replace the rational by the irrational. So we have the system of Jung, with an extremely suggestive psychology of insanity which may almost be described as insane psychology. We are told of man as embarking on a frail craft, on a sea of collective something which is mental, which has been handed on from ancestors, which has been putting difficulties in our way and making life difficult for us. But is that true for the normal man? I think it is not. The normal man, who is blessed with satisfactory ancestors and who has been trained in youth to use his reason, is not faced with these tremendous difficulties. His dream-world corresponds to the insane world, we are told ; it is the waking consciousness of the insane. We may be able to agree there. Hughlings Jackson told us, years ago, that we should study our dreams, and said that the more we understood our dreams the more we should understand insanity. But that does not mean that we are to explain our normal waking life as an outgrowth of dream-consciousness—as something superimposed upon dream-like activities, activities which, in the insane, are hopelessly in conflict with one another.

In order to keep the discussion as precise as possible, I would like to remind you of the historical origin of psycho-analysis. In 1893 and 1895 Breuer and Freud published medical histories of certain hysterical patients, in which they were able to show the existence of amnesias, or losses of memory, of an emotional nature.⁽³⁾ They found that when they brought up these lost memories with intense vividness, certain emotions were worked off and the patient became much better. They called this the method of psycho-catharsis or ab-reaction. And they went on further to distinguish two types of hysteria: a "retention hysteria," in which it was a case of emotional tendencies which had not had the opportunity of working themselves out in a complete way, such as grief, and so on. These cleared up under ab-reaction; the patients were able to work off their emotions, and in consequence they felt much better. The other group was the "defence hysterias," in which emotional memories had been kept from consciousness by a certain force; at any rate they were not ready to come back to consciousness except by much urging on the part of the physician. On this account Freud concluded that there was a force keeping them back, and he called that force repression. In this way he reached his idea of repression as a force which kept back the memories which were in conflict with the general mental life. Breuer went no further with Freud along this path. Freud found evidences of sexual origin which Breuer could not see, but he found later on that these early sexual memories were often imaginations and not real memories; that patients often brought up memories of early traumata, sexual aggressions, which could be proved not to have occurred. So Freud altered his attitude altogether and psycho-analysis was born. It only came into existence after the partnership between Breuer and Freud had been broken. In the second edition of the *Studien über Hysterie*, 1908, Breuer contributes an independent preface, in which he states that he has not actively concerned himself with the subject of psycho-analysis since the publication of the first edition, and that he has nothing to add to his contribution of 1895.

Freud's theory, as you know, took a new form: he considered that the troubles were due to disturbance of sexual development; he thought that the influence of sex began very early in life in the form of interest in the bodily excretions, sadism, masochism, exhibitionism, and curiosity, as well as love and hate felt towards parents or their substitutes (Œdipus complex). They can give rise to conflict, undergo repression, and cause symptoms later. So the process of psycho-analysis was not, for him, a process of liberating emotion in the ordinary sense, and in Breuer's sense, liberating an emotion which had been repressed, but a process of bringing up these early tendencies into the light of consciousness, and so giving the patient the oppor-

tunity of solving his conflicts for himself. I emphasise this difference because it is important at the present time. In the latest volume of Freud's collected essays, *Sammlung Kleiner Schriften zur Neurosenlehre*, Vierte Folge, 1918, ss. 306-310, he says he does not believe that an emotion is remembered, or can remain in the unconscious, as ideas of the past can remain unconscious. He writes—"The whole difference arises from the fact that ideas are 'occupations' (of energy)—based on memory traces—whereas affects and feelings correspond to processes of discharge (Abführungsvorgänge), the final manifestations of which are perceived as sensations" (p. 309). So, you see, this view is somewhat different from that of ab-reaction, and that is one reason why you do not find ab-reaction dealt with in recent Freudian literature. The concept of *libido* has taken the place of that of *emotion*.

I would like at this point to draw attention to the results obtained in the war. In one way the war was of course an appalling thing, but to the psychologist it proved very helpful, in that it offered him an opportunity, if he could secure it, of seeing cases very early, almost immediately after their symptoms had set in. In that way he was able to get simplified cases, and was able to test evidence and assess the value of certain factors. And that has been done, although it does not appear to have attracted the attention of scientists to any great extent as yet. Dr. C. S. Myers (⁴) in particular did important work along these lines in France. Many of his nerve patients were shock cases, whose symptoms included loss of memory. If the memory was brought wholly back or improved, the treatment of the other nervous symptoms was thereby helped very much indeed. He attributed this to the effect of re-association. Through his influence I was given an appointment in the field and saw cases early. Fifteen per cent. of my cases showed extensive loss of memory, and I found, like Myers, that by bringing back the lost memory (in light hypnosis) the other symptoms tended to disappear. But I soon began to notice that if I brought the lost memory back with emotional vividness, more pronounced results were obtained, and in quite a large number of cases one had the satisfaction of seeing the other symptoms clear up completely as the mere result of the re-association and emotional revival, independently of any other curative factor like suggestion, persuasion, or re-education. Loss of voice was always cleared up; one *always* found the voice return after the memory had been brought back with emotional vividness. Hearing was easier still to get back if it was a functional deafness. Tremor was first increased and then disappeared. Hundreds of times one saw this emotion surging to the surface, increasing the symptoms at first, and then they would die down and disappear. One thus obtained complete cure by ab-reaction or psycho-catharsis, enabling one to say that this was a definite factor of cure. So that whether or

not Freud has given up ab-reaction does not matter. And it throws light on the causation of hysteria. One saw patients, many of them thoroughly sound men—one knew some of them before they went into action and saw them afterwards—and, almost like an experiment in a laboratory, one could see the recall of the memory producing the cure. Myers said that this result was due to red-integration; the memories are brought under control of the rest of consciousness, and so the patient has more power to combat his symptoms as caused perhaps by suggestion, or by a direct shock to the nervous system, maybe of a slight organic nature—slight molecular changes which can quickly get right again. But I would go further and say there is yet another factor at work, and that is the working off of the emotion of fear, which emotion the patient had not the opportunity of working off when he was in the line. As one brought up the patient's memory, one saw him re-enact movements of terror, cowering down, covering his face with his hands, shouting and rolling off the stretcher, giving one the impression that he was working off fear, which owing to his state of stupor he had not adequately reacted to at the time. These patients were often in a state of stupor when they came to me. But when I sent them to sleep and put them through their experiences again, they passed into a "second state" and showed this fear. My own conclusion is that in many cases (*though not in all*) the fear that they began to experience in the trenches was cut short and held in suspense, as it were, because it was too strong; the mind broke, and the feeling was repressed.⁽⁵⁾

The question then arose: Was not that fear a present fear and a new one? It might be said—"Surely all you did was to bring up the memory of the fearful situation, to put the patient once more into that situation and bring up the present emotion: was not that the production of a new emotion of fear, more or less different from that experienced in the trenches?" My reason for not accepting this view is based on further experiments which I made in hypnotic cases, in recalling memories of early life. I did that in many of my own cases, and I found I could recall memories with hallucinatory vividness and could recall the accompanying emotions too. And the emotion recalled was one of childhood; it was an emotion which these men would have felt as children. In one case I recalled a memory of a patient's sixth birthday on two occasions at a fortnight's interval. The emotion aroused was first the feeling of delight at receiving certain birthday presents, followed by bitter grief at the thought of a little sister upstairs dying. A fortnight later, in the presence of witnesses, including the D.M.S. of the Fourth Army, I again recalled the same memories (having for the moment forgotten that I had done so before), and the two emotions followed one another in the same way. Therefore I

could not help feeling that they were childish emotions. I would accordingly disagree with Freud and others when they say that emotions cannot be remembered. I emphasise this because it is very important from the point of view of theory.

In the ab-reaction of repressed emotional memories, such as those of fear, we have the further factor of "removal of the repression." That is to say, the mental energy previously needed to keep up the repression and to hold the painful memories at arm's length is now placed once more at the disposal of the personality, to be used in more profitable ways. The previous "fixation" of this repressing energy and its deviation from the common fund of energy of the personality probably explains, to some extent, the feeling of fatigue that generally accompanies a psycho-neurosis.

The great fight is coming when we have to deal with Freud's libido theory, in which he is getting nearer and nearer to a physical explanation. His theory of libido is very different from that of emotional revival of Breuer. He gives an elementary account of it in his *Vorlesungen zur Einführung in die Psychoanalyse*, 1918. This is an extraordinarily good book which I hope everyone will read, as it is fascinatingly interesting. In his last set of collected papers, already quoted, he sets out a complicated theory of repression and dream-formation, in continuation of the difficult but important last chapter of the *Traumdeutung* (I have summarised that chapter in my paper on "Freud's Theory of the Unconscious," *Brit. Journ. Psychol.*, vol. vi, February, 1914), using the conceptions of occupation energy and counter-occupation energy. He compares the wishes in the unconscious with the shades in the Odyssey, which come to life again when they have drunk blood: they are ready to seize on energy if it is available. This energy, or libido, is not psychical energy; it is physiological energy. He suggests that it may be of a chemical nature: he is interested in all chemical theories of sex, and the spread of chemical stimulants into the nervous system and its reaction to them. Feelings, when repressed, whatever their original character, reach consciousness, if at all, in the form of *anxiety*.

It is this complicated theory of libido, with its ebb and flow, its transferences and its transformations, which will have to reckon with the expert criticism of psychologists and moderate psycho-therapists in the near future.⁽⁶⁾ Not so with psycho-analysis as a *method*. I, for one, would say that analysis should be carried out as far as possible and as fully as possible. If this is done conscientiously according to the method of free association, one may eventually get phenomena which correspond to what Freud describes, and, what is much more satisfactory, one may get cures. I would like to describe two "Freudian" cases which I have treated during the past year.

One of them was a case of obsessive fear of carrying infection to other people, which stimulated counter-activities, in the form of excessive washing and other precautionary measures. This patient, a woman, would occupy one or two hours in the process of getting up in the morning; she used innumerable towels, and could scarcely stop washing herself in order to make sure there was no infection. Even after this she did not feel sure about it. She was in a very bad way. The symptoms broke out with special force two years ago. I quickly found by analysis that she had at that time fallen in love with a married man, and had had to repress her feelings. The nervous breakdown and obsessive fear followed upon this. Moreover, she first feared carrying infection to this very man, and not till later did the fear become more generalised. Analysing her dreams—because anything in the nature of early memories and buried complexes is got at more quickly through dreams—one found that lavatories, etc., came more and more into her thoughts, and eventually the analysis brought up the fact that she was interested to an excessive degree in her excretory functions in early life. That interest had remained with her, although she had consciously reacted to it by an intense effort of rejection. It transpired that as early as her eighth year she showed a tendency to wash her hands with undue frequency, and other children laughed at her for it. When, at the age of puberty, her menses commenced, that horrified her. The obsession died down somewhat, until about a dozen years later it was revived by this love affair. Here, then, was a situation exactly like that depicted by Freud in *Totem und Tabu*—an example of a patient suffering from fear of infection, and being unconsciously interested to an excessive degree in her excretory functions. A psycho-analysis extending over about fifty hours made this clear to the patient herself and produced improvement. She was able to return to her work, and she is doing it still. Not only have the symptoms been checked, they have been diminished. Much more might be written about this case, but in general outline it might be explained in Freudian terms.

The second case is that of a woman, æt. 37, who ever since puberty has suffered from an impulse to kill. Analysis eventually brought up the "memory" of a happening at five years of age. At that age she slept in the same bed with her father, and woke up with a feeling that something had happened. There was much love between the two, and her mother used to say, "You are trying to steal him away from me." Just before his death she was horrified to find she had a momentary feeling of hatred, which again changed back into love. As soon as she told me of that "memory" (?), her symptoms disappeared as if by magic; she herself could scarcely believe it, for she had suffered from the symptoms for twenty-four years. She broke off the analysis, but I was not surprised to find a week or two later that the symptoms had recurred. The truth was that the Freudian phenomenon of "transference" (*Uebertragung*) had occurred, as I had suspected. She returned for further treatment a month later, and admitted that her feelings of affection previously directed towards her father had been transferred to me, with the result that the symptoms had temporarily disappeared. But then she had vigorously repressed this second edition of her feelings, just as she had originally repressed the first, and the symptoms reappeared. In the course of her second analysis she learnt how to avoid this second repression, and the symptoms again disappeared. A few days ago I heard from her, and learnt that she was still free from her obsession.

Now closer inquiry showed that, in the latter case, the transference occurred at the first interview. Apparently it was a transference of the feelings which she had had towards her father in early youth. So, according to Freud, she should have recovered completely as soon as that early memory had been brought up and worked out as we described, but this did not happen. Freudians might say that the case was really more complex, that it was probably one of "sadistic anal-eroticism." But this was not so. I continued the analysis later to see if it was. It was not that. I had still to deal with the "trans-

ference" after the Œdipus complex had been uncovered. So that presents a situation, slightly different from the Freudian, which one would need to investigate when considering the whole doctrine of transference.

Let us then consider this psycho-analytic factor of transference. Dr. Stoddart, in his admirable paper, explained that Freudians do not undertake educational work with patients ; they do not suggest things to the patient. They simply leave him to do all the work himself. But that is not really the Freudian view. Dr. Stoddart, I am sure, will agree, and if he had had more time he would, no doubt, have explained the essential working of transference. He would have shown that you must have transference, that if you do not have transference you will not do good. That is what Freud has said ; indeed, it is on this basis that he differentiates between hysteria and compulsion neurosis on the one hand and dementia præcox and paranoia on the other. In hysteria and compulsion neurosis you get transference and you can cure the patient ; but in dementia præcox and paranoia you do not get transference, because the libido is fixed on the ego ; the patient loves himself, and himself only, in a libidinous way. This narcissism, as libidinous self-love is called, prevents you getting hold of him and helping him at all. The former neuroses are classified as "transference neuroses," the latter as "narcissistic neuroses," or "paraphrenia." One weakness of the recent theory of narcissism is that the Freudians cannot point to cure as they have been able to do in the case of hysteria and the compulsion neuroses. The factor of cure is, to my mind, fundamental, not only from the patient's point of view, but also theoretically. If you cure your patients, it is, to a certain extent, confirmatory evidence of the truth of your theory. In the absence of that, one is inclined to doubt theories as to how to deal with cases.

Freud's latest work shows that he is much exercised over transference, and you will find he admits that there is suggestion in psycho-analysis. He says, whereas in ordinary suggestion there is a conscious process of suggestion, in psycho-analysis there is not only conscious suggestion, but there is also unconscious suggestion by the doctor, who exerts a definite influence over the patient. In these recent lectures he even admits that there is an element of education.⁽⁸⁾ Yet that element has been denied persistently by Freudians, and has been denied by opponents too. *Freud's method is, it is true, to get the patient to say everything that comes into his mind, and as it comes into his mind. But the affective rapport of doctor and patient determines both what does come into the latter's mind, and also the extent to which he can communicate it.*

Let me quote Freud's own words : "If the patient has to fight out the normal conflict with the resistances which we have discovered in

him in the course of the analysis, he is in need of a powerful motive-force to influence the decision in the sense, desired by us, leading to recovery. Otherwise it could happen that he might decide for a repetition of the previous result, and let that which has been raised into consciousness slip back into a state of repression. The deciding factor in this fight is, then, not his intellectual insight—which is neither strong enough nor free enough for such a function—*but solely his relation to the physician*. So far as his transference is of a positive nature, it clothes the physician with authority, and transforms itself into faith in his statements and views. Without such transference, or if the transference is negative, he would not for a moment let the physician and his arguments come to a hearing.”⁽⁹⁾

I am not claiming that analysis involves suggestion. The two mental processes are quite distinct from one another. But I am contending that the method of psycho-analysis, even when carried out according to the strictest rules of the Freudian school, does involve suggestion in the form of transference, and further, that unless positive transference occurs the method is powerless to effect a cure.

Yet another quotation from Freud will throw further light upon this situation. He writes: “Assuming that we have succeeded in clearing up the case satisfactorily by the production and resolution of a strong father-transference upon the physician, yet it would be a fallacy to conclude that the patient had previously suffered from such an unconscious fixation of his libido upon his father: the libido of the patient has been led thither from other positions.”⁽¹⁰⁾

One may admit that all transference is suggestion. But this proposition is not convertible: one cannot say that all suggestion is transference. Suggestion works in the very first days of life. Modern nurses know that babies two, three or four days old can be trained to good habits. One can train a baby less than a week old to habits of cleanliness, and as a result the excretory functions will be carried out automatically under fixed conditions. This is not done by transference, but it is done by suggestion. The young child is suggestible simply because it has not all sorts of other ideas and thoughts to bring up against the suggested idea or action.

Older children up to the age of fourteen or fifteen years can be successfully treated by suggestion, exclusive of analysis, without relapse. Bad habits, such as enuresis and masturbation, hardly ever fail to clear up completely by this method alone. In hundreds of cases of hysteria in grown men during the war, suggestion has produced complete cure without relapse.

In my view the psycho-analytic method of free association is extraordinarily potent in increasing the patient's suggestibility. Nor is this surprising. The patient lies on a couch, or sits in a chair, waiting

for ideas to come up. Is not this the state of mind which one tries to produce when one hypnotizes? Indeed, Freud explicitly admits it. He says that the state of mind in the method of free association is similar to the state of hypnosis. However little the analyst may say, he cannot avoid influencing the patient. Silence is often a more powerful suggestion than any speech, and unconscious suggestion is all the more deadly because of its unconsciousness. It is all very well to say that the analyst is on the look-out for this, and analyses it and brings it to the light of day. I do not believe that this is entirely possible. I hope to consider this question more completely on another occasion.

We have thus far considered the factors of *re-association*, *psycho-catharsis* or *ab-reaction*, and *suggestion*, and shown that they are relatively independent and effective factors in psycho-therapy. There is a fourth factor, which I would call *autognosis*, or self-knowledge. The patient is encouraged to strive towards an objective attitude towards his illness, to see himself from the outside, and to obtain an ever-deepening insight into the nature of his symptoms and their causes. Not only is the past investigated and discussed, but great attention is paid to the present situation, the patient's hopes and fears, his ambitions and ideals, his longings and his regrets. The difficulties in his path become more and more clearly defined. His dreams throw as much light upon this as they do upon his past. It is extraordinary how different the situation appears, after a few hours of concentrated autognostic work of this nature, and often symptoms simply fall away without the need of any deeper "historical" analysis.

This intellectualising process is a very real factor of mental cure. It is more emphasised in the method of Jung than in that of Freud, but not sufficiently emphasised in either.

(²) "Freud's Theory of Dreams," *Lancet*, April 19th and 26th, 1913.—(³) Breuer and Freud, *Studien über Hysterie*, Erste Auflage, 1895.—(⁴) "Contributions to the Study of Shell-shock," *Lancet*, 1915-19.—(⁵) "The Treatment of Cases of Shell-shock in an Advanced Neurological Centre," *Lancet*, 1918; "War Neurosis," *Proc. Roy. Soc. Med.*, vol. xii, 1919.—(⁶) In Prof. W. McDougall's theory of the structure of the mind, with its organisation of cognitive and affective dispositions based upon his doctrine of instinct, we have a psychological system which is probably more true to the facts of both normal and abnormal psychology than in Freud's "libido theory" (see his *Psychology*, chap. iii [Home University Library]).—(⁷) There is little doubt that this was really a "pseudo-memory" or figment of the imagination (phantasy). But although not corresponding to any objective occurrence, it had subjective reality for the patient herself and was in causal relation to her symptoms. According to Jung's theory, it would illustrate the working of "regression."—(⁸) *Op. cit.*, p. 530.—(⁹) *Ibid.*, p. 522 (translation and italics mine).—(¹⁰) *Ibid.*, p. 535.

Psycho-analysis and the Psychoses. By H. G. BAYNES, B.A., M.B., B.Ch.Camb., Zurich.

THE question, "What is the efficacy of psycho-analysis in the treatment of the psychoses?" recalls to one's mind the problem of the utility of surgical procedures as a remedy for cancer. For in both we have to deal with an ætiological factor that is still obscure.

In his analysis of a case of dementia præcox, Jung showed as long ago as 1903 that from the analytical standpoint there exists a significant similarity between dementia præcox and hysteria. From this aspect it would seem to be only a question of degree between the hysteric whose psychological development is short-circuited by an overmastering complex, and the precocious dement whose psychic activity becomes so rigidly held by one or more complexes that he loses altogether his function of adaptation; and yet we have to admit that, whereas in hysteria there is found a clear causal relationship between the complex and the disease, the same cannot always be proven in dementia præcox. There is in this disease another factor, a certain toxic element which we vaguely express when we introduce the term "organic" into our diagnosis. Whether this toxic factor arises from the impact of potent complex formations on a psychic structure already predisposed by hereditary taint to the abnormal "clotting" of psychical activity around the complex nucleus, or whether it arises from organic sources leading to a secondary congealing of psychic activity, is still a problem which demands unceasing inquiry. Nevertheless there exists considerable evidence in psycho-analytic literature that the complex is the principal causative factor, and this is borne out by the fact that many developed psychotic cases have been cured through analysis. One writes the word "cure" very charily when engaged with such deep-seated and recurrent diseases as the psychoses, since analysis is still too young for us justly to estimate its lasting efficacy; but Jung tells me of fully declared cases analysed by him seven years ago which have given up to the present no sign of relapse, and which he believes are absolutely cured. Jung is himself convinced that this toxic factor, which distinguishes the nature of a psychosis from a neurosis, is essentially a psychological factor, and he believes that just as the understanding of septic processes led to an entirely changed attitude of the surgeon towards every problem in surgery, so patient analysis and understanding of subjective psychology will produce in time a similar revolution not only in the domain of psychiatry, but in other departments of medicine.

It will certainly be argued that this bold classification of the psychoses as primarily functional ignores the fact that in a certain proportion of cases definite structural changes can be observed *post-mortem*. In reply to this it is not necessary to seek out examples where a prolonged

disturbance of function has produced corresponding structural changes, because this is an acknowledged law which governs our practice in dealing with every case of chronic disturbance of function both in medicine and surgery.

When we depart from the mechanistic and anatomical conception of disease the question, "Is this a functional or organic malady?" takes a new form, and we ask ourselves, "Is this condition due to some trauma or lesion producing a secondary disturbance of function, or is it a disturbance of function producing corresponding changes of anatomical structures?"

In the problem of disease envisaged from this angle we discover that our purely clinical interest in the *fait accompli* no longer satisfies us, and we have to assume the far greater responsibility of inquiring what is the primary cause of the disturbance in function. A case of attempted suicide by drowning or by coal-gas asphyxiation presents to the clinician certain interesting physical signs, which he is able to describe and discuss at length, but to the psychologist this conscientious labour of the clinician is quite irrelevant, since the causative psychological factor is ignored. In *felo de se* this psychological investigation is recognised as the vital problem, not only by the psychologist, but by the most illiterate member of the coroner's jury. Must we only permit such inquiry in cases of sudden and frantic attempts at self-destruction and withdraw from the more delicate task of probing into the psychological causes of prolonged and even more tragic self-destruction, such as we find in chronic alcoholism, morphinism, cocaine poisoning, etc.?

It is clear that when one allows oneself thus to speculate on the nature and ubiquity of this psychological factor in the causation of disease, one finds oneself face to face with what we must call the individual moral problem. It is possible to state the issue in various ways. One can say with the biologist that a man who destroys himself with alcohol is a man who has failed in his biological function of adequately adapting himself to his environment; or with the gnostics, that he has a false conception of God; or again, that he is seeking a refuge from reality. But these are only paraphrases of what every man in the street recognises as the individual moral problem.

Clinical medicine cannot be an exact science, because it assumes that the living mechanism, man, is a constant factor, and presents merely a theatre in which the two rival combatants, vital process and disease, determinate the issue; whereas every practitioner soon becomes aware that he is constantly being faced with an individual factor, which quite frequently upsets his scientific determinism. He soon discovers that he has to be very much more guarded in his prognosis than in his diagnosis, and he is forced to admit that this unknown individual factor in disease, which his text-books do not refer to, and which his intuitive

sense teaches him to appraise, is in most cases the real determining agent in the problem he has to deal with.

The practitioner practises his intuitive art without clear knowledge of the psychological processes he thus employs, and he believes all the time that his success or failure is due to the correctness or incorrectness of his clinical observations and the appropriate remedies they suggested to him.

Surely this individual element, which is so often the vital and decisive factor in the problems of internal medicine, is of paramount importance in dealing with problems that are primarily psychological; yet until recently a frankly mechanistic conception of mental disorders has prevailed. Every attempt on the part of Freud and Jung and the devoted band of psycho-analysts to examine psychical disorders from the subjective and individual standpoint was greeted by psychiatrists and neurologists all over the world with derisive and quite irrational condemnation and criticism. The unscientific and passionate opposition to this new psychological standpoint possibly found its root in an instinctive recognition of the immensely far-reaching alterations such an attitude, if accepted, must work upon the whole established structure of clinical medicine. The dragging of sexuality into medical discussions was like a desecration of the temple. One has only to mention the word "psycho-analysis," even to-day, in the presence of one of these high priests of medicine, to realise that one is a blasphemer outside the law.

In defining the real importance of psycho-analysis one encounters a certain confusion arising, not only from different schools and from the outcrop of new and ill-defined terms, but chiefly from the difference in attitude of its various exponents. This ranges from the attitude of the enterprising opportunist, who realises that here is a new technique which every really up-to-date practitioner must be prepared to employ if every other measure should fail, to that of the devoted disciple who is so deeply impressed by his own subjective experience of analysis that he no longer seems able to employ a critical discrimination, and is inclined to ascribe every disorder he meets to psychogenic causes. My own view is that a psychological factor of greater or less importance is universal in disease and cannot be with safety ignored, but that in those disorders where the malady is primarily in the psyche of a patient, systematic and unflagging subjective analysis is the only justifiable method one can adopt.

I use the word "justifiable" advisedly, for in the last analysis one discovers in every case of psychogenic disease a certain lack of moral responsibility, a refusal of the full onus that life demands of the individual, or an anarchic struggle between conflicting psychic entities. With this knowledge one can no longer be content with the removal of

neurotic symptoms by the mere application of some empirical device as a satisfactory method of treatment. It may be enough to restore the precarious *status quo ante*, but everyone who has practised hypnosis or suggestion, or employed the other more devious routes to the unconscious, is aware how unstable that *status quo* really is. The length of treatment, the individual element, the scarcity of analysts, and the dangers of insincere and reckless analysis make it expedient for us at present to choose both analysts and cases with considerable care; but these are the disadvantages of circumstance, not of principle.

I have been asked, "What is the principle by which analysis can effect a cure?" Briefly, I would say, it is the process of gaining moral autonomy by bringing up into consciousness those unconscious tendencies that favour anarchy in the psyche. This pluralistic conception of the psyche is very largely based upon the indefatigable work carried out by Jung, Riklin and the Zurich school in their researches on word-association. This work proved that complexes constellated by powerful affects have their own independent existences in the psyche, and are continually tending towards expression, colouring thoughts, motivating action, and creating a web of phantasy over the harsh contours of reality. The ego-complex, which comprises those mental products which are associated with and grouped around the ego, has, by the function of attention, the ostensible direction of psychic activity; but in so far as these other powerful complexes are repressed, they lead an autonomous life in the unconscious, threatening the equilibrium of the delicate psychical harmony. As long as a complex remains repressed in the unconscious it is dangerous, since it seeks expression by any channel, however crooked or devious, and often in direct opposition to the conscious moral standards of the ego. The term "moral autonomy," which is the aim of analysis, includes on the one hand the idea of individual responsibility, or a recognition of biological duties, and on the other the idea of individual freedom. It will be seen that this pair of opposites—submission to collective law and individual freedom—are complementary, and neither can exist without the other. For no man fully apprehends his responsibility to the civilisation he is part of unless he be a free individual; and no man can realize individual freedom unless he first submits to the collective laws on which his freedom is based. Thus the most completely differentiated individual is the man who is most fully adapted to the civilisation, which is his environment. Since biological duty is seen to be identical with individual responsibility, the man who fails in adaptation to the living contact of reality tends to seclude himself in the phantasy world of dreams, and eventually seeks refuge in a neurosis or in alcoholism, or in one of the other innumerable resorts of the irresponsibles.

Adaptation is an instinctive and unconscious function, and failure of

this function arises from some morbid process in the unconscious. It is the function of the psycho-analyst to discover this morbid process, and by the patient investigation of dreams (which are of their very nature symbolic presentations of unconscious psychic activities) to spread, as it were, the chart of life before his patient, and thus to help him to gain or regain his path of adaptation.

Jung's conception of libido or psychic energy has provided us with a symbol by which we can express the function of adaptation as a dynamic problem. Emotional conflict or any other morbid process which holds libido in the unconscious world of phantasy withdraws libido from the conscious world of reality. In a neurosis the dissociation of the morbid complex insulates it from the other psychical elements, and thus a considerable degree of adaptation to reality is maintained; but in the psychoses the morbid complexes may attract the whole of the individual's libido, and he then forsakes altogether the world of reality and inhabits the fantastic underworld of dreams.

"There is now no impulse to break through from this golden world of phantasy to the hard world that he has left behind; for here the tables are ever laden, and a thousand feasts are celebrated in golden palaces. The patient can only spare a few mysterious symbols for the gloomy, dim shores of reality; they need not be understood, for our understanding has ceased to be of any importance to him."

"It is not only the artist and the insane who are possessed of this phantasy-building instinct. For every human being has also within himself that restless creative phantasy, which is ever engaged in assuaging the harshness of reality. Whoever gives himself unsparingly and carefully to self-observation will realise that there dwells within him something which would gladly hide and cover up all that is difficult and questionable in life and thus procure an easy and free path. Insanity grants the upper hand to this something. Whenever it is uppermost, reality is more or less quickly thrown out. It becomes a distant dream, and the dream which enchains the patient wholly or in part, and often for life, has now the attributes of reality. We normal persons who have to do entirely with reality see only the products of disordered fancy, but not the wealth of that side of the mind which is turned away from us." The above two paragraphs I have quoted from Jung's paper on the "Contents of the Psychoses," as to my mind they perfectly express the impression one receives of that distant other-world in which the insane live, and which so many of them find completely satisfying. That is a picture of the incurably insane, who no longer seeks a bridge by which he may return to the shores of reality; but, as we are all aware, there exists a vast number of psychotics, who are still in touch with reality, and who can even perform the obligations of normal life, in whom the delusional system, though quite immune from introspection

and conscious criticism, still occupies only a portion of the psychic energy, and leaves the rest of the psyche correctly orientated. In such cases it is often possible to break through into this apparently insulated phantasy system by a patient and laborious analysis of the unconscious mechanism, till at last the patient gains insight into the morbid system and he can emerge into the free air of reality.

This subjective comprehension of the psychotic state entails upon the analyst a constant exercise of deep and sympathetic accord. He deliberately puts off the attitude of the detached and rational observer, who sees in the insane an incomprehensible and quite foreign being, and adopts the attitude of a sympathetic guide, who realises that the insane is *sui generis* of the same elemental texture as himself. He enters willingly into the unreal world of his patient that he may guide him step by step back into the world of reality. Here again the individual factor decides the issue. The analyst cannot provide the will and the purpose; he can only show the path. If the moral principle is inaccessible, or the ego so intrigued with the underworld of phantasy that the patient can no longer exercise the will to return, the analyst must come away empty-handed. The soul has crossed to the other side and does not wish any more to live the life of men. Thus the labour of the analyst may often appear fruitless to others, though indeed it is never so to himself. For only by this constant effort can he learn to become a safe guide.

This underworld of myth and phantasy in which the insane spend their timeless existence Jung has termed the "collective unconscious." It is as it were the flood upon which every individual has to steer his frail raft of conscious purpose. It is only by constant contact with other individuals and by the necessity of watchful navigation, by which obstacles, and dangerous and treacherous passages may be avoided, that this precarious vehicle of rational consciousness is kept in steady and balanced motion. Some individuals by their inherited temperament seem fated to be reckless or timorous navigators; they either ignore the rocks, rapids and whirlpools of this emotional flood upon which they are borne along or they are too conscious of the terrors and dangers of the voyage, and a comparatively trivial storm is sufficient to capsize them.

The work of rescue of these individuals who are submerged in the collective unconscious is the most exacting and exhausting labour the analyst has to face; for his efforts at rescue may even make matters worse, since at the best his knowledge of this unfathomable, uncharted element is very slight, and it is a law of life that the individual soul must sink or swim by his own strength and will, and cannot be saved by strength that is not his own.

I feel I ought to ask indulgence for this free use of metaphor, but we

have at present no terminology by which the handling of subjective processes can be made intelligible, and one is forced to fall back on the more primitive medium of analogy.

The point I wish to make and which psycho-analytic literature abundantly confirms is, that there exists no essential difference between the phantasy-world of the insane and the dream-world of the normal person. The difference lies not in the element of consciousness, but in the fact that whereas in the sane, the conscious world of reality is occupied by the ego and the unconscious appears only in dreams, in the insane the unconscious world of dreams is occupied by the ego and the world of reality has but the filmy texture of dreams.

If we compare the familiar fluctuations of our own affective states, that swing unaccountably from a mood of well-being to a state of despondency, with the still greater oscillations of the menopause neurosis and finally with the profound rhythm of the manic-depressive psychosis, it can be seen that this rhythmic motion of the unconscious is universal ; the variable element is again that of individual equilibrium or moral purpose. A man whose life is keenly directed by purposive energy and will is hardly aware of this deep rhythm of his soul, but the man who drifts in the aimless intoxication of stimuli is for ever burdened by his own emotional tides.

Our knowledge of this unconscious element is still so fragmentary and ill-defined that the analyst shows a very natural reluctance to embark upon these most difficult and arduous ventures, for he is fully aware that in the course of analysis a further stirring up of unconscious levels may plunge the patient deeper yet into his psychosis, and in cases where a psychosis threatens, but there is still maintained a precarious equilibrium, it is only natural that he is slow to undertake an operation that may destroy that tenuous hold upon reality and precipitate the very result that he is trying to prevent.

He may succeed or he may fail. If he succeeds the critics will say that the case was a simple neurosis, and if he fails the critics shout, "What did we tell you?"

The analyst who is sincere will not unduly heed considerations which merely involve his personal prestige, but he alone knows the risk he takes, and it is only fair that he should receive a sympathetic comprehension of his task.

One of the Difficulties of Psycho-Analysis. By SIGM. FREUD, M.D.,
LLD.Vienna.

[The discussion on psycho-analysis at the Annual General Meeting at Buxton, July, 1920 (see pp. 104 to 123), revealed some confusion of views as to what "Freudism" really means. We have thought it would be helpful, therefore, to include in this number a statement from Prof. Freud himself on the genesis and meaning of the "Libido Theory." We are able to do so by the kindness and courtesy of Dr. Ernest Jones, the Editor of the 'International Journal of Psycho-Analysis,' from which Journal (vol. i, pt. i, 1920) this article is reprinted.—Eds.]

I MAY say, at the outset, that in my title, "One of the Difficulties of Psycho-Analysis," I refer not to an intellectual difficulty that makes psycho-analysis hard to understand, but to an affective one which estranges the feelings of those to whom it is introduced, and makes them less inclined to accept or be interested in it. As will be noticed, both difficulties come to the same thing, for it is not so easy to understand a subject which one approaches with insufficient sympathy.

As some of my readers may still be strangers to the subject, it will be well for me to retrace some of the first steps. In psycho-analysis, from a great number of individual observations and impressions, something that may be called a theory has at last been formed, known as the *Libido Theory*. Psycho-analysis, as is well known, occupies itself with the explanation and cure of what are called nervous disorders. A mode of approach to this problem had to be found, and it was decided to seek for this in the life-history of the instinctive tendencies of the mind. Propositions concerning these tendencies became, therefore, the basis of our conception of nervous disorder.

The psychology that is taught in the schools gives us little satisfaction in answer to questions about the problems of feeling, and its information is never more doleful than it is on this question of the instincts.

It was left for us to discover a starting-point. Hunger and love are popularly distinguished as the representatives of the instincts which ensure self-preservation and propagation respectively. In acknowledging this obvious division, we distinguish in psycho-analysis also between instincts of self-preservation or ego-tendencies on the one hand and sexual impulses on the other. We call the mental aspect of the sexual instinct *libido* (sexual hunger), this being analogous to hunger, desire for power, etc., in the sphere of the ego-tendencies.

Starting on this basis, we then make our first significant discovery. We find that for the understanding of neurotic disorders we learn more from a study of the sexual impulses than from that of any others; in fact that neuroses are, so to speak, the specific diseases of the sexual function. We learn that the quantity of *libido* and the possibility of satisfying it and of disposing of it through satisfaction are the factors which decide whether a person develops a neurosis or not; that,

further, the form of the disorder is determined by the particular path of development which the sexual function of the individual patient has traversed, or—as we put it—by the fixations his *libido* has undergone in the course of its development ; that, lastly, we are able, by means of a rather technical form of psychical manipulation, to throw light on the nature of several groups of neuroses, and at the same time to resolve them. The greatest success of our therapeutic efforts has been with a certain class of neuroses that arise from the conflict between the ego-tendencies and the sexual impulses. For, in mankind, it may happen that the demands of the sexual impulses, which extend far beyond the individual, appear to the ego as dangers threatening its self-preservation or self-respect. When that is so the ego takes up the defensive, denies the sexual impulses the wished-for satisfaction, and forces them into those by-paths of a substitutive gratification which constitute nervous symptoms.

The psycho-analytic method of treatment then manages to revise the process of repression and to find a better solution of the conflict—one compatible with health. Uninformed opponents accuse us of being one-sided in our estimation of the sexual impulses, and call our attention to the fact that there are other interests in the human mind beside sexual ones. This, however, we have not for a moment forgotten or denied. Our one-sidedness is like that of the chemist who traces all compositions to the force of chemical attraction ; he does not thereby deny the force of gravitation ; he merely leaves the evaluation of it to the physicist.

During therapeutic work we have to concern ourselves with the distribution of the patient's *libido* ; we try to discover to which ideational objects his *libido* has been attached, and to make it free so as to place it at the disposal of the ego. In this way it has come about that we have formed a very curious picture of the original distribution of human *libido*. We have had good grounds for inferring that at the beginning of individual development all *libido* (all erotic impulses, the whole capacity for love) is attached to one's own person ; as we say, it "engages" one's own ego. It is only later that, in conjunction with the satisfaction of the main natural functions, the *libido* reaches out from the ego to external objects, and it is not till then that we are able to recognise the libidinous impulses as such and to distinguish them from the ego impulses. The *libido* can be later released from its attachment to these objects and again withdrawn into the ego. The state in which the *libido* is bound up with the ego we call "Narcissism," after the Greek myth of the young Narcissus who was in love with his own image.

We thus regard the course of individual development as an advance from narcissism to object-love, but we do not believe that the whole

libido ever passes over from the ego to the objects of the outer world. A certain amount of it always remains bound to the ego, so that narcissism survives in a certain degree even when object-love is highly developed. The ego is a great reservoir, out of which the *libido* streams towards its destined objects and into which it flows back again from those objects. The "object-*libido*" was, to begin with, "ego-*libido*," and may become so again. For complete health it is essential that the *libido* should retain its full mobility. In picturing this reciprocal relationship (between love of others and self-love) we may think of an amoeba, whose protoplasm sends out pseudopodia, projections into which the substance of the body pours, but which can at any time be again retracted so that the form of the protoplasmic mass is once more restored.

What I have tried to indicate by the foregoing is the *libido theory* of the neuroses, on which are founded all our conceptions of the nature of these morbid states, together with our therapeutic methods of dealing with them. We naturally regard the premises of the *libido theory* as valid also for the normal. We speak of the narcissism of the infant, and it is to the excessive narcissism of primitive man that we ascribe his belief in the omnipotence of his thoughts, and therefore his attempts to influence the course of events in the outer world by the apparatus of magic.

After this introduction I want to show how universal narcissism—mankind's self-love—has up to now been three times badly wounded by the results of scientific research.

(a) In his first thoughts about his dwelling-place, the earth, man believed that it was the stationary centre of the universe, with the sun, moon and planets circling around it. In doing so he naïvely accepted the impressions of his sense-perceptions, for he could feel no movement of the earth, and wherever he looked he found himself in the centre of a circle that encompassed the world of his vision. He took the central position of the earth to be a visible mark of its dominance in the universe, and this appeared to be in good accord with his proclivity to feel himself lord of this world.

We connect the destruction of this narcissistic illusion with the name and work of Copernicus in the sixteenth century. Long before him the Pythagoreans had already questioned the privileged position of the earth, and Aristarchos of Samos, in the third century B.C., had stated that the earth was much smaller than the sun and moved around it. Even the great discovery of Copernicus, therefore, had already been made before. But when it achieved general recognition human self-love suffered its first blow, the *cosmological* one.

(b) In the course of his cultural development man achieved a dominating position over his animal fellow-creatures, but, not content with

this supremacy, he began to place a gulf between their nature and his own. He denied to them all reasoning power, arrogated to himself an immortal soul, and pretended to a Divine descent, which allowed him to sever all bonds of community with the animal world. It is curious that this conceit is still as foreign to the child as to the savage or to primitive man ; it is the outcome of a later pretentious development. The savage, on the level of Totemism, has not found it repugnant to trace back his stock to an animal ancestor. Myth, which contains the deposit of this old mode of thought, gives the gods animal shape, and the art of the earliest times pictures them with the heads of animals. The child perceives no difference between his own nature and that of the animals. He is not astonished at animals thinking and talking in fairy tales. A feeling of fear that applies to his human father he displaces on to a dog or a horse, without thereby intending to depreciate his father. Only when he is grown up has he become so far estranged from animals that he can use their names to insult people.

We all know that, only a little more than half a century ago, the research of Charles Darwin, his collaborators and predecessors, put an end to this presumption of mankind. Man is not different from, or better than, the animals ; he is himself the outcome of an animal series, related more closely to some, more distantly to others. His latest acquirements have not been able to efface the evidences, in both his physical structure and his mental dispositions, of his equality with them. This is the second, the *biological*, blow to human narcissism.

(c) The third blow, which is of a psychological nature, is the most painful.

However humbled he may be externally, man feels himself to be sovereign in his own soul. Somewhere in the heart of his ego he has set up an organ of observation which watches over his own impulses and actions, to see whether they accord with his demands. If they do not so accord they are inexorably restrained and withdrawn. His inner perception, consciousness, gives the ego news of all important occurrences in the working of the mind, and the will, guided by these reports, carries out what the ego directs, modifies what is prone to accomplish itself independently. For this soul is not a simple thing, being rather a hierarchy of superordinated and subordinated agents, a labyrinth of impulses urging to action independently of one another corresponding with the multiplicity of instincts and of relations to the outer world, many of the impulses being opposites and incompatible with one another. For satisfactory functioning it is requisite that the highest agent should know all that is preparing, and that its will can penetrate everywhere to exert its influence. But the ego feels itself certain both of the completeness and trustworthiness of the reports and of the capacity of his commands to reach their destination.

In certain disorders, in the very neuroses that have been studied by us, it is otherwise. The ego feels itself uneasy ; it comes across limits to its power in its own house—the soul. Thoughts suddenly emerge the source of which one does not know, and one can do nothing to drive them away. These foreign guests seem to be even more powerful than those subordinated to the ego ; they resist all the well-tried powers of the will, remain unmoved by logical refutation, untouched by the contradictions of reality. Or there come impulses which are like those of a stranger, so that the ego disowns them ; but it has to fear them and to take precautions against them. The ego says to itself : This is a disease, a foreign invasion. It intensifies its watchfulness, but it cannot understand why it feels so strangely paralysed.

Psychiatry denies, it is true, that such occurrences mean a penetration of evil foreign spirits into the mind, but for the rest it only says with a shrug : Degeneration, hereditary disposition, constitutional inferiority ! Psycho-analysis, on the other hand, undertakes to throw light on these uncanny disturbances, engages in careful and laborious investigations, devises auxiliary conceptions and scientific constructions, and finally it can say to the ego : “Nothing foreign has entered into you ; a part of your own mind has withdrawn from your knowledge and from the command of your will. That is why you are so weak in defending yourself. You are fighting with one part of your strength against the other part, and cannot gather up your whole force as you would against an outer enemy. And it is not even the worst or the less important part of your mental forces that have become so opposed to you and independent of you. The blame, I have to say, rests on you yourself. You over-estimated your strength when you thought that you could do what you liked with your sexual impulses and that you did not need to take the least notice of their aims. Then they have rebelled and have gone their own dark ways to free themselves from oppression. They have claimed their rights in a manner that you can no longer sanction. How they have brought this about and along what paths they have gone you have not learned : only the results of their work, the symptom that you feel as suffering, has come to your knowledge. You do not recognise it then as a product of your own banished impulses, and you do not know that it is a substitutive gratification of them.

“The whole process, however, is only made possible through one circumstance, namely, that you are mistaken on another point. You are assured that you learn of all that goes on in your mind, if it is only important enough, because your consciousness then reports it to you. And if no news has reached you about something in your mind, you confidently assume that it cannot exist there. Indeed, you regard ‘mental’ as identical with ‘conscious,’ *i.e.*, known to you, in spite of the most evident proofs that there must constantly be much more

going on in your mental life than can be known to your consciousness. Come, let yourself be taught on this one point. What is mental in you does not coincide with what you are conscious of; whether something goes on in your mind, and whether you hear of it, are two different things. Usually, I will admit, the news service to your consciousness is enough for your needs, and you may nurse the illusion that you will learn of all the more important things. But in some cases, for instance in the case of such a conflict of impulses as I have mentioned, the service fails, and your will then does not reach further than the extent of your knowledge. But the news received by your consciousness is in all cases incomplete and often not to be relied on; often enough, also, it happens that you get news of the events only when they are over and when you can no longer alter them. Even if you are not ill, who can estimate what is stirring in your soul whereof you learn nothing, or are wrongly informed? You demean yourself like an absolute ruler who contents himself with the information given by his highest officials, and does not go down to the people to hear their voice. Look into the depths of your own being and learn first to know yourself, then you will understand why you had to fall ill, and perhaps you will avoid falling ill."

Thus psycho-analysis has wanted to teach the ego. But both the explanations—that the life of the sexual impulses cannot be wholly confined; that mental processes are in themselves unconscious and can only reach the ego and become subordinated to it through incomplete and untrustworthy perception—amount to saying that *the ego is not master in its own house*. They represent jointly the third injury suffered by mankind's self-love, which I should like to call the *psychological* one. No wonder, therefore, that the ego does not favour psycho-analysis, and obstinately refuses to believe in it.

Probably very few have realised with what momentous import for science and life the recognition of unconscious mental processes is fraught. It was not psycho-analysis, however, let us hasten to add, that was the first to make this step. Renowned philosophers may be cited as predecessors, above all the great thinker Schopenhauer, whose unconscious "will" may be equated with the "mental impulses" of psycho-analysis. It was the same thinker, by the way, who in words of unforgettable force reminded men of the significance of their sexual straining, so invariably under-estimated. Only that psycho-analysis does not stay at abstractly affirming the two theses so painful to narcissism—the psychical significance of sexuality and the unconsciousness of mental life—but rather proves them by means of a material that touches every individual personally and forces them to face these problems. And that is just why it brings on itself the aversion and opposition which still spare diffidently the names of the great philosophers.

The Future of Service Patients in Mental Hospitals. By WILLIAM ROBINSON, M.D., Ch.B., D.P.M., Senior Assistant Medical Officer, West Riding Asylum, Wakefield.⁽¹⁾

I. INTRODUCTION.

THE present paper is intended to furnish an account of the unfortunate class of case whose mental disorder, stated and considered to be due to war service, has been such as to necessitate certification and prolonged detention in mental hospitals.

It would appear that the public only imperfectly appreciates—(a) the true factors in the causation of the mental disorder; (b) the varieties of psychosis encountered, (c) the prognosis; while one is ever confronted with discontent on the part of relatives with regard to (a) the presence of Service patients in mental hospitals; (b) the failure to adopt certain methods of treatment to which prominence has lately been given by the Press.

During the Great War, and since the cessation of hostilities, the number of service patients under detention in a certain mental hospital has gradually increased. A record of 140 of such cases has been compiled.

For over four years the writer had experience of the treatment of mental disorders in France, and it was evident that a very large proportion of the soldiers who manifested psychic disturbances were really potential psychopaths before they entered upon military service. In the early days of the war it was common for men to suppress factors in their family and personal history which would be likely to result in rejection on presenting themselves for enlistment. As hostilities were prolonged and more men were necessary, many who had formerly been regarded as exempt from military service became eligible. These often produced evidence of the existence of either a family or personal psychopathic taint in the hope of possible exemption. Many such men, however, were drafted into what was considered a suitable unit.

Thus at all stages of the war potential psychopaths obtained access to, or were passed into the army. Once in it they involved trouble, anxiety and cost; now that the war is over they are burdens to the community, and unfortunately likely to continue as such.

Further, while in the army such cases were, in many instances, misunderstood, and were dubbed cowards, shirkers, and conscientious objectors. Indeed, it was common to find such soldiers before military courts and inmates of military prisons before their condition received proper investigation, understanding and treatment.

(1) Read at the Quarterly Meeting, November 25th, 1920.

Persons with insane heredity, and who had had one attack of mental disorder in civil life, were not only included in the army but frequently sent on foreign service, with disastrous consequences. Cases, too, were encountered who, suffering from insanity, were invalided to England, again to turn up at the same hospital abroad with a further recurrent attack.

In the years 1915 and 1916, when the term "shell-shock" was loosely applied, numbers of cases thus diagnosed were really suffering from recurrent attacks of insanity or from definite mental disorders occurring in potential psychopaths, the result of abnormal stress.

Cases of general paralysis were frequently encountered and the confusion therewith associated misunderstood. Soldiers bearing scars across their throats, the result of suicidal impulses in civil life, were often met. Feeble-minded lads, moral imbeciles and epileptics were also prominent features of the mental hospitals in France.

When mental hospitals were evacuated and turned into military hospitals, as many cases as possible were discharged previous to the institutions being taken over by the army. The army absorbed some of such cases, and thus increased its potential psychosis. The abnormal stress of military life in numbers of such soldiers led to a recurrence of mental disorder, and in many this has unfortunately resulted in permanent psychic disability.

In 1917 and 1918, when it became an urgent necessity to provide more men for combatant units, a combing out of such corps as the Army Service, Army Ordnance and others took place. It then happened that many men who had up to that period performed simple mechanical tasks were transferred to fighting units. The individual mental constitution was often not considered, and the abnormal stress of training, and perhaps of the fighting line (if perchance the soldier got so far), quickly yielded a further harvest of mental cases.

An analysis of the 140 cases under consideration shows that 49 cases, or 35 *per cent.*, never left the United Kingdom; 30 cases, or 21 *per cent.*, were at the various bases on foreign service; 61 cases, or 44 *per cent.*, were in the firing line.

2. ÆTIOLOGY.

In order to obtain as far as possible an accurate and impartial survey of the causes and associated factors, written information has been sought from the nearest relatives; personal interviews have been held with visitors; existing case-book records, completed long before the idea of the present paper arose, have been consulted and verified. Attention has been paid to documents relating to army service, and the reasons for classification of the cases as "service patients"; the patients them-

selves have been subjected to frequent and systematic examinations, and their replies to certain questions recorded.

In spite of this, in some cases the information has had to be discarded as unreliable, because the patient has neither relatives, friends, nor visitors ; inquiry letters have failed to reach the relatives to whom they were addressed, and have been returned ; inquiry letters have apparently been retained without evoking any response ; attempts on the part of the medical officer to obtain trustworthy histories have been met with suspicion and reticence on the part of the relatives.

(A) *Home Service Cases.*

Careful analysis of the 49 cases reveals the following points :

(1) Hereditary instability is present in 26 cases.

(2) Mental instability is recorded in 37 cases.

It is found that 6 cases had previously been insane, 2 had been in industrial schools, 10 had minor civil crimes, 8 had been in prison, 12 had army crimes against them.

(3) The psychic disturbance occurred at adolescence in 14 cases.

(4) History of alcoholic indulgence is present in 22 cases, and of syphilis in 19 cases.

(5) Six cases of injury are recorded. Of these, 2 only were due to and occurred on military duty. In one of these the injury was a dislocated shoulder, and the other causative and associated factors are—epileptic, alcoholic and neurotic heredity, congenital mental insufficiency, and personal alcoholic excess. In the other case the alleged injury was a fall from a horse, another factor being insane heredity. He has been in an industrial school as a boy, he is of poor mental development, and the final psychic disturbance which required certification and detention occurred at adolescence.

(6) Epilepsy had occurred in pre-war days in two cases, and a history of previous neurasthenia is obtained in six cases. One case of brain lesion was secondary to a depressed fracture of the skull, and occurred previous to military service.

(7) In one case only the mental disorder, which occurred at adolescence, appears to be due to the stress of military training.

(B) *Cases with Foreign Service at one or other of the Bases.*

The constant factor is that of the stress of military life at one or other of the "bases."

Analysis of the 30 cases which are included under this class shows that—

(1) Hereditary instability is present in 12 cases.

(2) Mental instability is recorded in 23 cases.

It is elicited that 2 cases had previously been insane, 9 had minor civil crimes, 4 had been in civil prisons, 11 had army crimes.

(3) The mental disturbance occurred at adolescence in 10 cases.

(4) Alcoholic excess is recorded in 16, and syphilis in 11 cases.

(5) Under the heading of trauma are found 2 cases. In one case there was sunstroke associated with congenital mental insufficiency, adolescence and alcohol.

The second case, whose mental disturbance was stated to have been caused by a kick from a horse, was constitutionally of a very inferior mental type.

(6) Previous neurasthenia is recorded in one case.

(7) Out of the 30 cases in this group, in 27 the alienist would regard the stress of military life at the base as an accidental exciting factor, tending to hasten the onset of psychotic phenomena.

(8) Three cases in this group require special attention. In the first no other factor beyond the stress of service could be ascertained. The mental disability in the second case seems to have been caused by stress of service and dysentery. The third was a case of hysteria, due to suggestion, and under treatment he rapidly improved, and has been discharged.

(c) *Cases with Foreign Service at the Front.*

The factor constant throughout is that of the stress of military service at the "front."

Including in this class are 61 cases, and an analysis of the causative and associated factors reveals the following outstanding points :

(1) Hereditary instability is present in 24 cases.

(2) Mental instability exists in 50 cases.

It is found that 2 cases had previously been insane, 3 had been in industrial schools, 17 had minor civil crimes recorded against them, 9 had been in civil prisons, 23 had army crimes against them.

(3) Mental disorder occurred at adolescence in 17 cases, and at the pre-senile period in 3 cases.

(4) History of alcoholic indulgence is present in 26 cases, and of syphilis in 25 cases.

(5) Under the heading of traumatic factors are 2 cases of injury, 3 of "shell-shock," 5 of exposure to "gas," 7 of wounds.

(a) *Injury cases.*—The first of these cases has neurotic and alcoholic heredities. The trauma was caused by a fall down a lift in pre-service days. The mental disturbance occurred at adolescence.

The second case is one of congenital mental insufficiency, and the trauma was a fractured humerus.

(b) *Shell-shock cases.*—Case No. 1 has epileptic heredity, congenital mental insufficiency and acquired syphilis.

The second case is one of congenital mental insufficiency, who has exhibited signs of mental instability, and the psychic phenomena have occurred at adolescence.

The third case manifests insane, epileptic and neurotic heredity, and as in case No. 2, the mental disturbance has occurred at adolescence.

(c) *Gas-poisoning cases*.—The first case under this heading presents insane heredity and adolescence.

The second soldier had previously been insane, had previously had epilepsy, is congenitally mentally insufficient, and there is evidence of alcoholic excess.

The third case in this series is congenitally feeble-minded, has exhibited evidences of mental instability and has acquired syphilis.

The fourth case presents neurotic and alcoholic heredity, and is constitutionally of an inferior mental type.

Case No. 5 is congenitally mentally insufficient, and there is a history of alcoholic excess.

(d) *Wound cases*.—The first of this series has had a slight shrapnel wound of left shoulder. There is insane heredity, congenital mental insufficiency, evidences of mental instability, and a history of alcoholic excess.

The second case has a similar wound to case No. 1. There is a history of insane heredity.

Case No. 3 has had a bullet through the soft tissues on the plantar surface of the big toe. There is insane heredity, congenital mental insufficiency, evidences of mental instability and a history of alcoholic excess.

The fourth case of the wound series has had an abrasion of the chest-wall, said to have been caused by a sniper's bullet. There is epileptic and alcoholic heredity. The patient is constitutionally of an inferior type, and has presented signs of mental instability previous to his present breakdown at adolescence.

The fifth soldier has sustained a slight shrapnel wound of the soft tissues around the left elbow. There is insane heredity and congenital mental deficiency, whilst the present psychosis, needing certification and prolonged detention, has occurred at adolescence.

The sixth case has had shrapnel wounds of back, right shoulder and forehead. They are all superficial. He is congenitally of an inferior mental type; he has, in pre-war days, exhibited signs of mental instability; there is a history of alcoholic excess, and his present mental alienation has taken place at adolescence.

The final case of the wound series has sustained a bullet-wound of right shoulder. He is constitutionally mentally deficient.

(6) Previous epilepsy is present in 3 cases, and a history of pre-war neurasthenia is obtained in 2 cases.

(7) It would appear that practically all the cases in the above "front line service group" would sooner or later have manifested mental disorder, without the particular stress to which their insanity is attributed by their friends and relations. Even in cases of physical trauma and profound emotional disturbances the secondary part played by these suggests itself to the alienist.

Before considering the various types of insanity encountered in the service class of patients, it will be interesting and instructive to call attention to a comparison between these patients and the usual mental hospital male admissions as regards inherited instability, alcoholic indulgence, syphilis, civil crimes.

	Inherited instability. <i>Per cent.</i>	Alcoholic indulgence. <i>Per cent.</i>	Syphilis. <i>Per cent.</i>	Civil crimes. <i>Per cent.</i>
Ordinary admissions	. 33	. 26	. 27	. 25
Home service cases .	. 53	. 45	. 38	. 31
Base cases . . .	. 40	. 53	. 36	. 33
Front line cases . .	. 40	. 43	. 41	. 34

3. TYPES OF MENTAL ALIENATION.

The writer proposes to divide the varieties of psychosis encountered in the service class of patients into—

(a) Amentia.

(b) Dementia.

Amentia is used to signify the mental condition of patients suffering from deficient neuronie development, and who consequently manifest subnormal and therefore abnormal mental phenomena. Dementia is employed to connote the mental condition of patients who suffer from permanent psychic disability, based upon neuronie degeneration, the result of insufficient durability.

Amentia.—Out of the 140 patients in the class of case under consideration, 75 patients, or 54 *per cent.*, come under the heading of amentia. As a rule, the percentage of amentia cases in the same mental hospital population is in the neighbourhood of 40 *per cent.* It is, therefore, clear that the service patients being considered contain a larger number of persons of deficient neuronie development.

A detailed description of the varieties of amentia encountered is not proposed.

As a class, on the emotional side, there is a general loss of control of the emotions, so that they are unstable, garrulous, vain, egotistical, and readily exhibit either undue excitement or depression.

On the intellectual side education and knowledge are of a low order. Perception is distorted and hallucinations are common. Memory exhibits faulty retentiveness and impressibility. Train of

thought shows, in some cases, practically absence of ideation ; in others it is abnormally slow ; whilst in a third variety, extremely rapid and grotesque association of ideas prevail. Delusions of persecution and grandeur are common, and only in very few are such ideas based upon experiences of war service.

In the sphere of volition a loss of control prevails. They are erratic and eccentric, they are quarrelsome, violent, dangerous and suicidal, and the number of cases on special cards is unusually large. They are impulsive, they tear, smash and destroy. They are untidy in appearance, and they are extremely poor workers.

Dementia.—Dementia in the service patients under investigation accounts for 65 cases, or for 46 *per cent.* of the total.

The striking feature is the great number of cases of general paralysis encountered. This malady accounts for 37 *per cent.* of the total number of the service patients to which reference is made. From the years 1910 to 1914 inclusive, out of 1,052 direct male admissions there were 208 cases of general paralysis—practically 20 *per cent.* From the years 1915 to 1919 inclusive, out of 1,190 male admissions the number of cases of general paralysis was 217. This is slightly over 18 *per cent.* Therefore, in spite of the large proportion of service patients admitted suffering from general paralysis, the percentage of cases of general paralysis amongst male admissions has not risen. This, at any rate, suggests that the general paralytics amongst the service class now occupy the position which would have been their lot had there not been the Great War.

Out of the 49 home service cases, 18, or 37 *per cent.*, are cases of general paralysis. Of the 61 foreign service cases, 22, or 36 *per cent.*, show signs of the same disease.

It would therefore appear that, at any rate in the case of the patients with whom the writer is dealing, the stress of front line service did not accelerate the onset of the mental and somatic manifestations of general paralysis more than did the stress of military training in England.

4. PROGNOSIS.

The outlook with regard to recovery and ultimate discharge from mental hospitals of the greater majority of the patients included in the service class can only be regarded as extremely bad.

Out of the 140 cases to which reference has been made, 96 are transfers from war mental hospitals and 44 are direct admissions. (Of these 44 cases, 10 have been previously patients in war mental hospitals.)

Of the above cases : (a) Nineteen have died (15 of these died from general paralysis of the insane, verified by *post-mortem* examinations,

and one from cerebral syphilis). (b) Three cases have recovered and have been discharged. (c) Three cases have returned to their homes "not improved," as the result of constant pressure by their relatives. (d) Two cases are likely to recover. (e) In the remaining 113 cases the prognosis is bad.

In a more recent series of 33 cases, of which it has so far been impossible to obtain full particulars, and of which 25 are direct admissions and 8 have been in war mental hospitals, there does not appear to be a single recoverable case.

It might, of course, be argued that one does not expect to have many cases recoverable, seeing that they have mostly been received from the war mental hospitals, and were regarded as incurable.

On the other hand, of 69 cases classed as service patients (granted that 10 had previously been in war mental hospitals) who are direct admissions, the same dark outlook as regards recovery exists.

5. SUMMARY AND CONCLUSIONS.

At the present time, when a change of legislation with regard to the treatment of incipient mental cases is contemplated, and when such a change is likely to increase the discontent already existing amongst the relatives of service patients, and when it will lead to further outcries from certain sections of local governing bodies, it is well to emphasise the following points :

(1) A large percentage of service patients have been sent to mental hospitals, after *prolonged* treatment in military hospitals, because they were considered *incurable*.

The service patients in mental hospitals are *not* the class of case which can be treated and cured by suggestion, psycho-therapeutic conversations, hypnotism, or psycho-analysis.

(2) The mental condition of service patients in mental hospitals is such that special institutional treatment is necessary, both for the welfare of the patients and the safety of others. The provision of small special local mental hospitals for service patients would not only involve extraordinary expenditure, but might possibly lead to serious fatalities, as the forms of mental disorder from which the majority of service patients suffer seem to be only imperfectly understood by those from whom the greatest amount of outcry emanates.

(3) As a class, the service patients have replaced the pre-war class of chronic mental hospital patients. Moreover it appears that in comparison with ordinary mental hospital male admissions, the service class of case presents the following features :

(a) The history of hereditary instability is more frequent.

(b) Criminal history is more common.

(c) The incidence of alcohol and syphilis as causative factors is unusually great.

(d) Amentia is more frequent.

(e) The percentage of cases of general paralysis is much greater.

(f) The recovery-rate of direct admissions is unusually small.

(g) In the series of cases investigated, mental alienation apparently attributable to injury, wounds, shell shock, gas-poisoning has occurred amongst potential psychopaths.

(h) Out of 140 cases, in 136 cases the mental trouble has occurred in potential psychopaths, and the various factors of stress associated with home service, service at the base, front line service, would be regarded by the alienists as accidental existing factors.

It is impossible to arrive at any other opinion than that the service patients, as a class, would, as regards the majority, have been patients in mental hospitals sooner or later had there been no war. As regards the minority, they would probably have constituted the pre-war groups of waifs and strays, and formed the inhabitants of the casual wards of workhouses and the inmates of civil prisons.

In conclusion, an apology appears to be necessary for laying stress upon facts which are the common experience of the majority of the members present. The excuses offered are that :

(1) The public is disposed to regard the service patient as one who is curable and ought to be cured.

(2) The statement that the cases are incurable is likely to lead to accusations from the layman of pre-judgment, and unwillingness to resort to recently advocated methods of treatment when old ones are ineffective.

Clinical Notes and Cases.

Notes on a Case of Pellagra occurring in an Insane Patient. By
F. E. RAINSFORD, M.D. Dubl., Resident Physician, Stewart Institution, Palmerston, co. Dublin.¹

SOME of you may do me the honour to remember that in 1913 I read a short paper before you in which I described a fatal case of pellagra—the first ever noted in this country. In the year in which that case occurred cases had also been recorded in Napsbury Asylum by Dr. Blandy, in Bethnal House by Dr. Cole, and in the Holloway Sanatorium by Dr. Emma Johnstone. Since then I have not heard much on the subject, nor, as far as my memory serves, has any case been recorded.

(¹) Read at the Autumn Meeting of the Irish Division, November 4th, 1920.

The case I am now about to describe differs in some small particulars from my previous case, but I believe you will—after hearing its details—agree with me in thinking that I am justified in diagnosing it as one of pellagra.

Miss X—, a hospital nurse, æt. 38, was admitted on July 18th, 1920, into the Stewart Institution Mental Hospital. In her medical certificates she is described as "melancholic, morose, restless, and stated to be sleepless and to refuse food."

The history furnished with her states that she was trained in a London hospital, and that during the war she went on a visit to a married friend in East Africa. On her arrival, owing to shortage of nurses, she was asked to take up work, which she did, first at Mombasa and later at Nairobi. She worked very hard, got quite broken down, and, in addition, got frequent malarial attacks, which further complicated her condition.

On her arrival in England she was met by a cousin, who informed me that he could hardly recognise her, she looked so fearfully thin and debilitated. Taken to her home in Ireland she did not improve, got very depressed, restless and confused, refused food, and became more physically broken down. Amenorrhœa is noted for seven months previous to admission.

On admission she is noted to be very thin and worn, not inclined to speak, restless, etc. Took light food, and could, when pressed, answer questions about herself fairly rationally. A rash of an acneiform nature was noted, chiefly affecting chin and sides of face around nose. It was red, not crusty, and had somewhat the appearance of adenoma sebaceum. Later the rash affected the forehead, and I was struck by its crescentic outline and clearly-defined margin. It remained in this state for some weeks, but about the beginning of September it got more inflamed and developed crusts, and it was now general over the face, running from about half an inch from the roots of the hair on the forehead to the tip of the chin. The eyelids were never affected, nor did the rash spread beyond the malar prominences on either side, and the ears were never involved. The nose was particularly sore both inside and out, and pus formed on the bridge. Her mental state at this time was one of apathy, and she seldom spoke. She ate food fairly well, but without any interest in it. Generally she stood motionless on the floor most of the day. She slowly lost weight.

As ordinary treatment for the eruption had no good result, and as the patient was growing weaker and was now confined to bed, I asked Dr. Walter Smith to see her, which he did on September 19th. His opinion was that it was a severe dermatitis and that it would be difficult to heal, and that there was probably a toxic origin.

Under his treatment the eruption slowly healed, but there was no improvement in the physical strength, which was being slowly sapped by continuous diarrhœa. There was a very heavy and offensive smell off the patient, and we now noted commencing gangrene of the toes, and later the skin on the hands and wrists became discoloured and began to desquamate. The gangrene of the toes was of a dry character, and one toe got completely destroyed, while the great toe on either foot became black and had an unhealthy serous discharge. There was never any purpura, but shortly before death a small septic sore formed on the crest of the tibia.

The case was now one of slow and progressive marasmus, and though plenty of nourishment was taken no physical improvement was ever noted.

October 9th: Eruption on face is healing slowly. Some of her toes show signs of low circulation, with black, bruised appearance; diarrhœa still at times.

October 19th: Eruption healing; feet cold, toes black. Two or three loose, foul motions daily.

Towards the end of October she was seen by Dr. Moorhead, who could not quite concur in the diagnosis of pellagra, but thought that the condition was one due to deficiency of vitamins and suggested a more extended vegetable dietary. This was done, but no special improvement followed.

October 29th: Rash almost healed. Diarrhœa not so bad. Is taking nourishment well.

October 30th: A change for the worse occurred. Patient got very restless and

talkative; said she was better; had to be watched in bed, as she made constant efforts to get up; was very weak, and, if she did get out of bed, fell.

She died on the morning of November 1st, the rash on the face having then almost disappeared.

Reviewing the case, I base my diagnosis of pellagra, not so much on the face condition (which was more like severe crusty eczema), as on the purple-like discoloration of the hands and wrists, on the general prostration and debility, and on the gangrenous condition of the feet.

In 1913 Dr. Cole described a case in which the hands were deeply stained to a purplish brown, affected area continuous and containing no healthy patches; and he especially notes that the ends of the fingers from the roots of the nails were entirely free. This is an accurate description of the condition of the hands in my case also.

In none of the cases which have been described can I find any occurrence of gangrene of the extremities.

There was never any rise of temperature, the urine was free from albumen, and the reflexes (knee) were present.

The question of causation is still obscure, and notwithstanding extensive investigation little fresh light has been shed on it. Dr. Tambon attributed it to a fly. Profs. Alessandrini and Scala considered that it was a disease strictly limited to districts where the water comes from a clay soil and flows on or stands upon clay, and that it is the effect of a chronic intoxication, of which the cause is silica in colloidal solution in waters of a determined constitution.

It is remarkable that nearly all the cases recorded in England, with, I think, one exception, occurred in females, and it is further to be noted that even if pellagra attacks a healthy individual, it generally, after some recurrences, produces mental unsoundness. All the cases recorded in England, I should add, occurred in insane patients.

It is worth while considering whether, after all, the cause of pellagra may not be some deficiency of vitamins in the dietary, and whether it may not be a disease allied to scurvy. I think this theory is well worth further investigation, and should any further case of this kind ever come under my notice I would be disposed to treat it by anti-scorbutic methods.

A Case of Mental Deficiency associated with Dyspituitarism. By C. FARRAN-RIDGE, B.Sc., M.B., Ch.M.Sydney, House Physician, Bethlem Royal Hospital, and CECIL WORSTER-DROUGHT, M.A., M.D.Cantab., Neurologist to the Out-patient Department, Bethlem Royal Hospital, etc.

OUR chief reason for recording the following case is on account of its presenting the interesting association of mental and moral deficiency

with definite evidence of endocrinopathy. The patient will be referred to as "P—."

Family history.—As we consider the family history of special significance it is given, at the risk of prolixity, in rather more detail than is usual in a case-report.

The patient's *grandfather* on his father's side is described as having been a hard-working, upright and honourable man, a tobacco importer by occupation. He was born with one leg shorter than the other. The paternal *grandmother* was an invalid for many years; she suffered from asthma and eczema, the latter being an hereditary disease in her family. Her youngest brother was a congenital imbecile and another brother was mentally unstable.

P—'s *father* has always been a "ne'er-do-well." He is said to have been an affectionate and warm-hearted boy, but incorrigibly lazy, weak in character, easily led and a notorious liar. He was sent to a prominent public school, but had to leave under a cloud and later failed to pass for Sandhurst, not so much from want of ability as from lack of application. He could never stick to anything for long and took to drink early in life. At about the age of twenty-three P—'s father enlisted in the army as a private and soon afterwards went out to India with his regiment; after seven years' service he advanced as far as the rank of sergeant, but never obtained a commission. He married at the age of 30–31; his wife had Indian blood in her veins, her father being English and her mother Eurasian. Shortly after the marriage he began to drink to excess, and in fact was hardly ever sober. At one period he developed delirium tremens. After leaving the army he gained his livelihood as a "journalist," and is said to have published a book of war poems. In physical appearance he is reported to be normal and rather tall.

Concerning P—'s *mother* and her family, unfortunately no details are available. She is inclined to be obese, has a broad face, and the patient is said to resemble her rather than his father in appearance.

P—'s *father* had two brothers and two sisters. Both the brothers are peculiar in their aversion to society, and neither is married; one suffers severely from eczema. Of the sisters, one, *æ*t. 54, is certainly eccentric; her periods appeared abnormally late and have always been irregular. She is said to possess a selfish, jealous temperament, and has never cared to mix with people but has been preoccupied with church work. Late in life she married a clergyman—a widower. She has had no children. The other sister, for many years a missionary in India, also married late in life and has recently been operated on for cancer of the breast.

The patient is the fifth child in a family of eight. He has one brother and two sisters living. The sisters are both married and reside in India. Little is known about them. The brother lives in England; his age is 15, but physically he is more like a youth of 17–18. He has a deep voice and is 5 ft. 10 in. in height. Although younger he has always dominated the patient. He is good at athletics, but is said to be lazy like his father, and will not work at school. Recently he has been accused of dishonesty.

History of case.—The patient (P—) was born and brought up in India. At an early age he became infected with malaria. He contracted typhoid fever when seven years old and nearly died. At the age of ten he had a fat face, though very thin legs; he could not run like ordinary children, but used to waddle with his feet turned outwards. At the age of twelve he had an operation for adenoids and it is recorded that he became pulseless under the anæsthetic. He suffered from nocturnal enuresis up to the age of 12–13. Ever since he was quite a small boy he has stolen and has always been untruthful. He would tell people the most extraordinary and purposeless lies, looking them

straight in the face while doing so. He is described as having been a dull and sulky child "He would not speak for ages if offended." His aunt took him to England at the age of twelve and he was sent to school at C—, but had to be removed on account of his thieving propensities. He opened other boys' letters and stole postal orders from them; he appropriated his schoolfellows' parcels and other property. He had not sufficient foresight to destroy the evidence of his dishonesty. Dozens of opened letters were discovered at the bottom of his trunk. He has always been very afraid of corporal punishment and at school was terrified at the idea of being caned. After a further very unsuccessful and chequered career he was sent, eighteen months ago, to a commercial school. It was, however, not long before his aunt discovered that he had not been attending regularly; he had filled in the attendance-card himself and had been going to cinemas instead of school. His aunt was herself frequently the victim of his incurable habit of stealing. Whenever detected he was always upset at being found out, but never expressed any sorrow. He often promised to reform, but never did so. Many times he has narrowly escaped imprisonment. In desperation his aunt appealed to the Church Army for assistance. They took him into their labour home and later sent him to a farm in South Wales. There he pocketed the money that he received for the milk and was sent back to the Church Army headquarters. He was given another chance at a farm elsewhere, but again failed to "make good" and was dismissed. He arrived in London destitute; he pawned his overcoat to raise funds and stayed in a cheap hotel in Edgware Road. When his money was exhausted he came under the care of the Salvation Army. He was found work in a wood-yard, but was sent away after one day's trial as "useless." Shortly afterwards he came under our observation and was admitted to Bethlem Royal Hospital on July 15th, 1920, for investigation and treatment.

Present condition of patient.—P— is a young man of nineteen, though with his round, chubby face he more resembles a boy of fourteen. His voice has never "broken." He is short in stature—*i.e.*, 5 ft. 2½ in.—and is inclined to adiposity. His childishness is the most arresting feature of his mentality. His disposition is affectionate; he is good-natured and tractable. On request he is ready to do any odd jobs in the ward and performs them efficiently. There have been no complaints against him on the score of dishonesty or untruthfulness since his admission. He is boyishly eager to take part in the games played by the other patients. His mental defectiveness is brought out by a systematic examination. According to the Stanford revision of the Binet-Simon tests (Terman) his mental age is nine years and four months, his intelligence quotient being 0·58: he has an excellent memory.

Physical examination.—The outstanding feature of the physical examination is the dystrophia of the external genitals. His penis is infantile and his testicles correspond in size with those of a boy of five years.

The next point that strikes one is the general hypotrichosis. The pubic hair is very scanty and the axillary hair absent. He has never shaved.

His head is square-shaped, maximum length 171 mm., maximum breadth 141 mm., thus bringing him into the brachy-cephalic class with a cephalic index of 83. The auricular head height equals 114 mm.

An X-ray photograph of the skull shows a sella turcica aberrant in size and shape. It is constricted antero-posteriorly, and is smaller and more shallow than the normal. The bones of the cranium are irregularly thickened.

His face is abnormally broad, the bizygomatic width being 138 mm. The ophryo-mental length of face equals 111 mm., giving a total facial index of 80.4. The eyebrows are well marked and tend to meet in the mid-line. The eyes are set widely apart. The root of the nose is broad. The palate is broad and flat. The teeth are poorly developed, and do not meet properly in biting; the lower incisors are widely spaced. The gums are not well formed. The tongue shows no abnormality.

The hair of the scalp is of fine texture. It is somewhat dry, and extends deep down the back of the neck.

The ears are asymmetrical; the left ear is small in size, but approximates to normal in shape. The right ear is abnormal, the helix being imperfectly developed.

The skin, taking it as a whole, is soft and smooth. There is some brown pigmentation in the region of the flanks. In the region of the neck are to be noted a few small brown pigment spots and a tag of skin.

The vertebral column shows distinct lordosis. There is a well-marked coccygeal dimple.

The gluteal folds are not well defined. The buttocks tend to pass into the back of the thighs without demarcation.

The thorax is unexpectedly well developed, the circumference of the chest measuring 810 mm. on inspiration and 760 mm. on expiration. The antero-posterior breadth of the chest from the junction of the body of the sternum and xiphoid process to the corresponding vertebral spine equals 154 mm., from the angle of Ludwig to the fifth dorsal spine 127 mm.

The fingers tend to be long and tapering, and there is slight curving of the little finger towards the ring finger. The nails are short, broad and scored. The most characteristic feature of the feet is the wide separation between the first and second digits. The form of the hands and the width of the separation between the great and second toes suggest a relationship with mongolism. The cleft between the second and third toes does not extend as deeply as the corresponding cleft between the other toes, thus producing a localised web-foot arrangement.

The right lower limb is about a centimetre shorter than the left.

The patient appears to suffer from anosmia; he is unable to smell oil of lavender or oil of cloves. Otherwise, neurologically, there is nothing further to note. The visual fields show no abnormality. The optic discs are normal. There is no nystagmus. The pupils are equal, central, circular, and react readily to light and convergence. All the other cranial nerves are normal. There is no sensory loss. All movements are well performed. There is no muscular atrophy. He complains of general weakness, and states that he cannot lift anything heavy. This asthenia is not very evident. The reflexes are normal.

There is no enlargement of the thyroid gland.

The pulse is regular, 68. The blood-pressure is 110.

His blood yields a negative Wassermann reaction. A blood-count reveals nothing very noteworthy except the fact that the blood-platelets are very much increased. His blood clots unusually rapidly.

His sugar tolerance is remarkably high. No sugar was excreted in the urine after a dose of 300 grams of dextrose.

His urine is normal.

His temperature, taken over a period of three weeks, is slightly but persistently above normal, ranging round 99° F.

X-ray photographs of his hands, elbows and knees show a wide separation of all the epiphyses.

Remarks.—With regard to the physical aspect, it will be seen that the case differs from the classical Fröhlich syndrome of hypopituitarism in the absence of polyuria, of mononuclear leucocytosis, and of persistently subnormal temperature. Further, the adiposity is not so pronounced as that usually associated with typical hypopituitarism. The dystrophy of the genitals, relative hairlessness, tapering fingers, slow pulse, high sugar tolerance and X-ray appearance of the sella turcica lead us to place the case in the class of dyspituitarism. At the same time, however, there is evidence that other endocrine glands (*e.g.*, adrenals) are involved to a lesser degree, as is not unusual in these cases. Rössle(1), for instance, recently reported a case of dystrophia adiposo-genitalis in which, at autopsy, an abnormally small pituitary gland, with a much-reduced single posterior lobe, was found concealed in a very small and shallow sella turcica and showing no connection with the infundibulum; in addition, there was marked hypoplasia of the suprarenal and thyroid glands and testicles. In connection with cases of dyspituitarism it is also of interest to note that, according to recent experimental work by Camus and Roussy(2) on dogs, lesions of the base of the brain in the region of the hypophysis, though not actually involving the organ, may produce considerable genital atrophy, infantile penis and testes, with some adipose accumulation.

Investigation of the patient's mental condition failed to show any conscious psycho-sexual perversion or homosexuality, which are not infrequently associated with dyspituitarism. The only known and ascertainable moral defect is the unusual symptom of kleptomania; he frankly acknowledges this fault, and is invariably optimistic about his ability to conquer it.

In conclusion we wish to thank Prof. Arthur Keith for kindly supplying the head measurements, and Dr. J. G. Porter Phillips, Superintendent of the Bethlem Royal Hospital, for permission to publish the case.

REFERENCES.

- (1) Rössle.—*Naturwiss-Med. Gesellsch.*, Jena, 1916, July 20th.
- (2) Camus and Roussy.—*Congress of Physiology*, Paris, 1920, July.

Occasional Note.

Ministry of Health (Miscellaneous Provisions) Bill.

The *coup de grace* given by the House of Lords to this Bill, as far as the Clause 10 of the original Bill was concerned, will be received with feelings of relief rather than of regret by the majority of members

of our Association. It was clearly indicated to the Minister of Health, by the telegram sent on the occasion of the quarterly meeting in November last, that the Association would rather have the clause dropped entirely than that it should become law without the emendation it had urged. At the same time the further postponement of a solution of the question of better provision for the early treatment of mental disorders, long overdue, is regrettable. However, we would rather have no change at all than one in the wrong direction.

In many ways the proposals of the Ministry of Health would have had a retrograde effect. They were of doubtful efficiency as regards the incipient insane, and, as regards the certified insane, were decidedly reactionary.

For many years the asylums have been doing their uttermost, in spite of many difficulties, to become definitely hospitals—institutions to cure mental disorders in addition to affording a place of refuge to the mentally afflicted. The governing bodies of asylums continue to do all they can to range their institutions on the same level as other institutions for the sick, and in this way remove as far as possible the so-called stigma of lunacy which unhappily still attaches itself to mental patients, though not so much as formerly.

Unfortunately, public opinion is badly informed on the work and possibilities of our mental hospitals, as was shown by the astonishing assertions made by members of the House of Commons when the Bill was in Committee "A," and also at the third reading. The ignorance displayed of the results of treatment was profound, and the fact that the mental hospitals are at present engaged in treating successfully early and even late cases of mental disorder was quite ignored. Our complaint is that we do not get the patients soon enough, and we maintain that a measure which would enable patients to be sent to mental hospitals at an early stage of their disorder is the only solution, except in the very earliest stages, when no doubt general hospital clinics and out-patient departments would be of great value.

That a new public department, costly to the State, which will be inexperienced for many years, should be created to do work which can be done quite satisfactorily in the mental institutions already established, where the staff of doctors and nurses are specially trained and skilled for it, required considerable justification, and, so far, the reasons assigned have not impressed us. The exclusion of the Board of Control, with all its wealth of knowledge and experience, from active participation in any scheme for the treatment of mental disease would in any case be prejudicial to its success and without public confidence.

The only way to remove the "stigma of lunacy" is to make the County and Borough asylums "Hospitals for the Treatment of Nervous and Mental Disorders," and administer them so that both voluntary and

legally detained patients can be treated in the one institution. Hope could then be cherished equally by all treated there, and none would be singled out to be officially damned as regards their prospects of recovery and future usefulness in the outside world.

Part II.—Reviews.

68th Annual Report of the Inspectors of Lunatics (Ireland) for the year 1918.

THIS report made an appearance early in the present year. Our review is delayed through unforeseen circumstances, for which an apology is due and herewith offered.

As only a portion of the period under consideration had escaped through the clouds of war, the well-known effect of a prolonged war upon the number of insane was borne out by a reduction of over one thousand patients as compared with the preceding year, the actual total being 22,868, or 522 per 100,000 of the estimated population.

The rate of decrease had rapidly grown from 77 in the year 1915 to the above-mentioned figures for the year 1918, giving an average decrease of 578 per annum for these four years.

This decrease, however, did not apply to private asylums and mental hospitals, in which a slight increase of population took place—a fact that perhaps may be accounted for by the holding up of the exportation of the insane from the northern province owing to a ruthless submarine campaign.

It is a matter for regret that the diminished insane population of the district and auxiliary asylums cannot be claimed as evidence of improvement in the mental health of the people. On the contrary, an increasing death-rate—now at 11·1 *per cent.* of the daily average number resident—would appear to be the chief cause.

In their previous report the onus of this increased mortality had been placed by the inspectors upon a combination of ills in the shape of serious influenzal epidemics, and a decreased nutritive value of foodstuffs owing to the then prevailing condition of war.

The receipts for maintaining the public asylums are mainly derived from two sources. The local rates bear the heavier burden, as, in justice, they should. The amount contributed under this heading in the financial year ending March 31st, 1918, came to £650,000. The other considerable source of income is dependable upon the state of the local taxation account, out of which a capitation grant is made by the Government in respect of each institution. The full amount certified under this arrangement has not been met by the account in question, it having, for the past ten years, proved insufficient to meet its entire liabilities.

At one time the capitation grant supplied a considerable proportion

of the actual cost of maintenance. In the period under review, owing to the increased cost of living, the said grant had dwindled in value to the neighbourhood of 25 *per cent.* of the maintenance rate, and, accompanying this diminution, there has been a coincident decrease of respect for official authority by many of the committees concerned. The importance of this may be appreciated when it is recognised that the threat of withdrawing the grant is about the only hold the Crown possesses to curb any unsatisfactory proceedings that may take place within the walls of these institutions—apart, of course, from anything of a definitely illegal nature. It is therefore greatly to be deplored that this feeble hold should be still further weakened by the fact that the local taxation account stands some £26,000 short of its certifiable liabilities so far as asylum work is concerned.

The average annual cost of maintenance for 1917-18, calculated upon the gross expenditure, works out at about £42—an increase of over £5 in comparison with the year 1916-17. The recovery-rate remains practically unaltered, being 37·4 *per cent.* of the admissions.

Amongst modernists of the extreme type some exception may be taken to the classification of insanity utilised by the Inspectors, and which is similar to that adopted by the Board of Control. Extremists, however, are rare in Ireland—speaking strictly in a medico-psychological sense. Were it otherwise, one could conceive an agitation arising for the removal of the terms “mania” and “melancholia” from a list of the forms of mental disease, and the inclusion therein of certain other well-established entities.

On coming to the causative factors of insanity, one is struck by the very similar results to be seen on comparison of the infrequency with which heredity as a whole, and insane heredity in particular, are attributed as the principal causes of mental disease in patients entering district asylums, and in those admitted into institutions for the treatment of the upper and middle classes. For the former, the percentages are 24 and 22 respectively, which approximate closely to the 22 and 20 of the private hospitals. These figures would appear to be unduly low, and the writer believes that, were a full family history available in all cases, the results of heredity as a cause would show a percentage of from 50 to 60.

The general unrest—so much in evidence in the world of labour—has not left the Irish asylum service unscathed. For the first time in its history, strikes have taken place in several large institutions, which left a peculiarly helpless community to be nursed, cared for and protected by very inadequate numbers, to whom all honour is due. It is unfortunate that these differences, arising between a committee and its nursing staff, could not have been adjusted without bringing the fight to bear upon the welfare of the mentally afflicted.

The report concludes with many valuable statistics, both of a medical and financial nature, which reflect credit upon the officials concerned in their compilation.

Mental Deficiency (Amentia). By A. F. TREDGOLD, M.D., F.R.S. Edin. London: Baillière, Tindall & Cox, 1920. Third Edition. Pp. xx + 525. Plates 29. Price 25s. net.

The interest which is inseparable from the appearance of a new edition of such a well-known and standard work as the one under review is considerably enhanced by reason of recent legislation and the resultant focussing of public opinion on a branch of medicine which has hitherto not loomed large. The coming into operation of the Mental Deficiency Act in 1914, though unfortunately coincident with the war, has nevertheless resulted in the accumulation of a mass of new facts, both sociological and scientific, which have a special bearing on the subject, and which cannot have been without influence in the recasting of certain portions of this book.

As Dr. Tredgold's work has for the most part received the seal of universal approval, and his conclusions are not appreciably modified by recent research, it has seemed useful to comment only briefly on such portions as have remained unaltered, reserving a fuller commentary for the new matter which now makes its appearance for the first time.

In his opening chapter on the "Nature of Mental Deficiency," the author, after considering the various criteria of the defective mind, defines the "normal standard" of mentality as the presence of a mental faculty which enables the individual so to manage his affairs and regulate his conduct as to be able to maintain existence without external supervision or support. To this faculty Dr. Mercier gave the very appropriate term of "wisdom." In the course of evolution the maintenance of existence has come to be a matter of conscious adaptation, and is in fact the essential concern of mind. This is regarded as the fundamental quality of the human mind—the irreducible minimum, and a lack of it constitutes mental defect.

The mental defective, though not invariably, is for the most part a poor scholar, but, on the other hand, may evince artistic or æsthetic attributes of a high order. Conversely, the dunce or dullard at school may in after life prove to have the possession of such faculties of control and adaptation as enable him to conduct his life successfully, albeit in a humble sphere.

The pedagogic standard *per se* is seen, then, to be inadmissible. No more acceptable to the author is the view which regards mental defect as an atavism or fixation of an earlier evolutionary stage. The co-relation of the different grades of mental defect with the various evolutionary periods of a normal child, though convenient and superficially plausible, is seen to be fundamentally false. The one represents an immature phase of a normal organism, while the other is inherently lacking in the capacity for development. In fine, the criterion of mental defect, though psychological, is one of conduct, and is thus brought into conformity with Mercier's well-known definition of mental disorder in general.

In the full and comprehensive chapter on "Causation," the author reviews contemporary opinions in a judicial and impartial manner. Having first stated that in the great majority of cases of amentia the condition is due to innate or germinal causes and that it is trans-

missible, he proceeds to show that "amentia must be regarded as due to a diminished potentiality for development in that constituent of the germ-plasm which determines the development of the central nervous system—the neuronie determinant." As, however, it is a tendency to neuronie imperfection and not a specific characteristic which is transmissible, one may explain the fact that amentia is frequently not transmissible as such, but is rather "the final manifestation of a progressive psychopathic diathesis." In other words, the neuronie imperfection appearing in the ancestors in the form of minor neuroses may be so reinforced by toxæmia, malnutrition, or unfortunate mating as to culminate in the descendants in gross amentia. The length of time taken to achieve this end, or the question as to whether it be achieved at all—for favourable matings with healthy strains may eradicate it—is merely a question of the degree of original impairment and the nature of the environment.

The view is upheld that the original germinal variation which results in amentia is attributable to environment, and much experimental evidence is adduced in favour of the author's admittedly heterodox point of view. The positivist attitude (of certain American writers) as to the transmission of a neuropathic diathesis along Mendelian lines is not substantiated. The manifestations of the neuropathic constitution being relatively complex and frequently merely potential, do not lend themselves to numerical enumeration, and the question is regarded as still *sub judice*.

Discussing the effect of malnutrition in the causation of amentia, reference is made to an inquiry made by Dr. Smiley Blanton and others into the mental and nervous state of school children attending the Volksschulen of the town of Trier, where from 40 to 50 *per cent.* of the children had suffered from a noticeable degree of malnutrition during the war. It was found that "children free from organic nervous disease, and with parents of average intelligence, very rarely become feeble-minded through malnutrition even of an extreme degree." On the other hand, "the feeble-minded, the border-line defectives and those classed as dull . . . are affected, and often permanently, by malnutrition of even a moderate severity. . . ." This interesting biological experiment, a by-product of the war, lends support to the author's own contention that the effect of malnutrition in causing amentia is of comparatively little moment in the absence of neuropathic predisposition.

Dealing with the relative incidence of the different degrees of amentia, and the fact that mentally defective children are commoner in urban than in rural areas, the suggestion is made that the numbers are swollen by the inclusion of children who are not really defective but merely dull and retarded. It must be admitted that there is much to support this contention, and the statistical error which results constitutes perhaps its least significant aspect. For the defective "suspect," once relegated to a special school, is apt to remain there, and in any case does not benefit by contact with children of a lower intellectual plane.

In the section devoted to "Pathology," the author having stated that the "essential basis of amentia is an imperfect or arrested development of the cerebral neurones . . .," proceeds to a detailed description

of the histological changes in the cortical cells which are characteristic of amentia. The types of cells which are found in amentia are illustrated in the frontispiece, and a semidiagrammatic illustration is included which shows in parallel columns cortical sections in amentia, dementia, and the normal brain respectively.

The basis of classification into primary and secondary forms is adhered to, and this classification, though theoretically unexceptionable, is from a clinical standpoint perhaps more assailable. It is difficult, for instance, to subscribe to the statement that "the majority of cases of amentia are readily referable to one or other of these two chief forms." The inclusion of a third group—the delayed primary amentia—may perhaps be regarded as a tacit admission of the difficulty in allocation, at any rate on the clinical evidence and history alone. A clear pen-picture of typical examples corresponding to the different grades of amentia is given. The differentiation between the imbecile and the feeble-minded person as defined by the Mental Deficiency Act is admittedly obscure, and the author's own definition of imbecility is to be preferred.

The section devoted to the "Neuro-Physiology and Psychology of the Ament" is, perhaps, one of the most fascinating passages in the book. For a proper appreciation of the anomalies of mind and conduct which characterise the ament, a preliminary study of the psychological principles underlying normal conduct is obviously essential.

The presentation of the essential facts within a reasonable compass and always with an eye to the main objective—the interpretation of the conduct and mentality of the defective—is accomplished with a lucidity of diction and power of exposition which are rarely surpassed. The various tricks of manner and speech, the bizarre and purposeless actions, the cries and grimacings, the disorder or perversion of instinct, which distinguish the ament are interpreted in psychological and physiological terms, and the reader is led by successive stages to a clear conception of those higher mental attributes and adaptations in which the ament is so conspicuously lacking.

In natural and logical relationship to the above stands the question of the moral imbecile. The chapter dealing with it has been entirely re-written for the present edition, and merits therefore somewhat fuller consideration. Partly because of a certain vagueness in the legal definition, and still more because it concerns a type of defective which prior to the inception of the Mental Deficiency Act had not been clearly recognised or defined, it was to be expected, perhaps, that the subject would present certain difficulties, especially from the diagnostic and legal aspects. It may be said at the outset that this expectation has been fully borne out, and that in actual practice the moral imbecile has proved a stumbling block both to magistrates and to medical men who are called upon to certify defectives.

The moral imbecile, it will be remembered, is defined as "a person who from an early age displays some permanent mental defect coupled with strong vicious or criminal propensities on which punishment has had little or no deterrent effect." The crux of the difficulty, as Dr. Tredgold remarks, lies in the interpretation of the term "mental defect." Mental defect is frequently, if not generally, regarded as synonymous with

intellectual or scholastic defect, and this narrow conception of one term of the definition has undoubtedly prevented certification in many instances.

The conduct of mankind is largely determined by certain fundamental instincts, or innate and specific tendencies to action. Whilst in the main the actions initiated by the so-called normal instincts are essential to the conservation of the individual or the race, it is obvious that an immediate gratification of, say, the sexual or acquisitive instinct without reference to ulterior considerations might very well prove disastrous alike to the individual and to society. The recognition of this fact has led in civilised communities to the subordinating of the instincts of individual members to the corporate good and to the formulation of a well-defined code of conduct. The failure to recognise the claims of society in this respect and the necessity of conforming to its standards constitutes the essential characteristic of the moral imbecile.

As the author clearly shows, the defect probably comprises at least two factors—namely, a congenital lack of the moral sense, combined with an absence of that somewhat elusive but none the less real faculty best connoted by the term "Wisdom." A third factor which enters in, and which is necessary to explain the actions of many individuals of this class, is the presence of abnormal instincts, or tendencies to actions which, while never useful or salutary, are often actually detrimental, such as, for example, the instinct to steal, burn, or injure, merely for the immediate gratification which ensues and not to any specific end. Thus, briefly, may be summarised the author's conception of the moral imbecile. The criterion of moral imbecility is ultimately then one of conduct, and where from an early age this has been consistently bad, purposeless, and silly, as well as unamenable to discipline or punishment, there need be no doubt as to the diagnosis.

The chapters on "Mental Tests," "Diagnosis," "Prognosis," and "Education" will be found practically helpful not only to the physician but to teachers, educationalists and those concerned with the administration of cases under the Mental Deficiency Act.

In the concluding chapter, in which Dr. Tredgold discusses the "Sociological Aspect of Mental Defect," is struck perhaps the gravest note.

Even to those accustomed to sifting the family histories of aments, some of the statistics here quoted come as somewhat of a shock. It is not very reassuring, for instance, to be informed that 67·8 *per cent.* of the adult feeble-minded are either inmates of institutions (for the most part under the Poor-law) or in receipt of outdoor relief. Even more disquieting is the statement that about 20 *per cent.* of the total number of prisoners are mentally deficient, and that if juvenile or adolescent delinquents only be considered the proportion is nearly double that number.

The whole of this chapter, indeed, may be taken as an indictment of society's present method of dealing with the adult ament of mild type, and in particular in turning loose on the community to shift for himself a type of individual who, *ex hypothesi*, is congenitally unable to lead an unprotected existence. The fact is, of course, that the feeble-minded need permanent protection, and the Act of 1913, whilst ostensibly recognising this, does not ensure its being adequately carried out.

There is equally no doubt that the prison is no place for mental defectives, and that a large number of the cases habitually dealt with in the courts and sentenced to terms of imprisonment fail to be recognised for what they are. The obvious implication, though the author does not comment upon it, is the advisability of submitting all doubtful cases coming before the courts to expert medical opinion. This is already being done in certain areas, notably in Essex and in Birmingham, and has, one believes, been attended with satisfactory results.

It is difficult within the limits of a brief review to adequately survey the manifold aspects of mental defect which are dealt with so exhaustively in this work. It is inevitable, perhaps, that certain sections should make a deeper and more personal appeal than others and so receive a consideration disproportionate to their relative value in the general scheme. It were invidious and perhaps a little fanciful amid such a varied appeal to single out one note more dominant than the rest as symbolic of the general trend. The insistence upon the importance of conduct in the consideration of the ament, which recurs again and again throughout the book, has seemed, however, to justify such an interpretation. Alike in distinguishing the defective from the normal mind, in differentiating the different grades of defect, in diagnosis and in certification, and finally in the effect of the ament upon the community, the view-point and significance of conduct have been kept unswervingly before the reader. Whatever the intention of the author, such is the impression conveyed, and the dynamic conception of amentia which results and which is consistently maintained would alone confer distinction upon a book which, in the future, as in the past, will be regarded as the leading work on the subject in the English language.

J. E. MIDDLEMISS.

Feeble-mindedness in Children of School Age, By C. PAGET LAPAGE, M.D. *With an Appendix by* MARY DENDY, M.A. Manchester: Longmans, Green & Co., University Press. Second edition, cr. 8vo. Pp. xiv + 309. Price 10s. 6d. net.

The revised edition of Dr. C. Paget Lapage's text-book deals concisely with all aspects of the problem of mental deficiency, concentrating more particularly on the practical problems of ascertainment and treatment, and confines the section of ætiology and pathology within reasonable limits. The changes in procedure necessitated in consequence of the Mental Deficiency Act and the Elementary Education (Defective and Epileptic Children) Act of 1914 are fully considered. Dr. Lapage employs in the main Dr. Ireland's classification, and shows how much more frequently cases of special types of secondary amentia are to be found in hospital practice than in examinations of children for admission to special schools or institutions. He quotes figures from his own experience as Physician to the Manchester Children's Hospital as well as from his experience at the Sandlebridge Colony. These statistics from personal experience are of great value for comparative purposes, though, like others, he finds that over 90 per cent. of children suitable for treatment as feeble-minded are not of any special type,

even when the epileptic are put into a separate class. At first sight defectives appear very little different from ordinary children, and the author emphasises the necessity for appreciating fully the fact that the majority of such children show no constant physical characteristics by which they may be recognised.

He gives an interesting description of moral deficiency which would prove more effective as a definition of the type than that on the Statute Book, but as he indicates the good effects of discipline in many cases, few could be dealt with as moral imbeciles.

A valuable section deals with the classification and treatment of speech defects, which he points out are largely due to want of attention. He does not refer apparently to the hurried slurring speech which is very characteristic of a feeble-minded child.

In a section on diagnosis he readily emphasises the necessity for comfortable surroundings and ample time for examination, so much so that most school medical officers must envy him his advantages in this respect. He points out the difficulties of successful examination in the presence of others. While describing his methods in considerable detail he seems to have but a poor opinion of the generally-used Binet-Simon tests. He does not, however, show clearly how far his own tests have been standardised for variation of age and environment. A section of special value to medical officers deals with the diagnosis of feebleness of mind in the deaf, a matter sometimes dismissed with too brief a survey.

Considerable attention has been directed to prognosis, both immediate and remote, and he shows how frequently too low an estimate is made of the possibilities of paralytic cases, while too much is expected of mongols and cretins, the treatment of the latter especially being often disappointing from a mental standpoint.

The study of ætiological factors follows the usual lines in attaching the greater importance to the neuropathic inheritance, but it is of interest to note that he lays some stress on the views of the late Dr. Hunter, that it is important to note the position in the family of the parent as well as of the defective, mentally defective children being found much more commonly in the families of those who are the first born of the earliest born members of the branch thus affected by the hereditary taint.

Miss Dendy's appendix on the treatment and management of feeble minded children should be read by all interested in the management of institutions and their inmates.

In a series of appendices a list is given of institutions which will take defective children and adults, though this omits certified houses and approved homes, for reasons of economy of space. The omission is to be regretted, for it is just such information that is obtained with difficulty by the general practitioner advising in connection with a private case.

Dr. Lapage may be sure of a wide circulation and cordial reception of his valuable volume.

F. S.

Psychology from the Standpoint of a Behaviourist. By JOHN R. WATSON, Professor of Psychology, The John Hopkins University. J. B. Lippincott Co., 1919. Pp. xi + 429. Price 10s. 6d. net.

Behaviour psychology is essentially an American development, and this volume, written by one of the leading exponents of the new school, will be read with great interest by those concerned with the problems of psychology, as it is the first text-book that has been written from the strictly behaviouristic standpoint. In a sense the term "psychology" as applied to behaviourism would seem to be a misnomer, as it is a psychology which ignores the "psyche" altogether. Prof. Watson indicates this in his preface when he says: "The present volume does some violence to the traditional classification of psychological topics and to their conventional treatment. For example, the reader will find no discussion of consciousness, and no reference to such terms as sensation, perception, attention, will, image and the like. These terms are in good repute, but I have found I can get along without them, both in carrying out investigations and in presenting psychology as a system to my students. I frankly do not know what they mean, nor do I believe anyone else can use them consistently." These sentences suffice to make it clear that the behaviouristic movement is frankly revolutionary in its aims. Much is implied in these phrases. They would seem to exclude the conventional subject-matter of the psychologist as irrelevant to the understanding of the human being, and introspectionism is dismissed as obstructive to the path of progress. We have thus to begin all over again, throw over the past, and erect our knowledge on a new foundation. Such an attitude is not difficult to understand, and a certain impatience with conventional psychology is not unnatural. As Prof. Watson says in another place⁽¹⁾, in referring to the various formulations of *meaning*: "A more barren wilderness of words it has never been my lot to meet." Perhaps, however, in the above-quoted phrases, Prof. Watson has permitted himself to indulge in a certain over-emphasis, since we all surely know perfectly well what the terms he rejects mean, even though they may be undeserving of study, except in terms of movement.

The opening chapter is concerned with the definition and scope of psychology, and with its relation to other sciences. Behaviourism is exclusively concerned with the organism in action, with the response of the individual to his environment, and its aims are "to predict human activity with reasonable certainty," and to formulate "laws and principles whereby man's actions can be controlled by organised society." The organism is considered exclusively from the physical standpoint, and there is no mention of consciousness as a function or of its contents. At the first reading of the book, the intrinsic merit and value of the observations it contains are somewhat obscured by "investigatory behaviour" on the part of the reader, as to how Prof. Watson manages to avoid consistently the use of mental terms, and at times it is difficult to realise that we are reading something that we have read many times before in the language of ordinary psychology. Thus, for instance, the paragraph heading "The number of habits which can function simultaneously," for the moment is not grasped

as another way of putting the old question in respect to attention.

In the second chapter the methods of psychological investigation are described and included under the following headings :

1. Observation with or without instrumental control.
2. Conditioned reflex methods.
3. Verbal report methods (speech reactions).
4. Methods of testing (intelligence, special ability tests, etc.).

After these preliminary considerations, a chapter is devoted to the physiology of sensation, behaviouristic terms being substituted in the place of those usually employed. Thus, in describing visual hallucinations the author writes: "We see the subject reacting apparently to a visual object to which other persons do not react," and in this way avoids purely mental terminology. Following the study of "the receptors and their stimuli" the student is furnished with the further details of sensory-motor adjustment in two chapters which deal with the nervous system (neuro-physiological basis of action), and the muscles, excretory organs and ductless glands (organs of response). The behaviour responses of the organisms are divided into four groups: (1) Explicit habit responses (conduct as ordinarily understood, including language); (2) implicit habit responses (thinking—here placed in inverted commas and defined as sub-vocal talking,—bodily sets and attitudes, conditioned reflexes); (3) explicit hereditary responses (instinctive reactions); (4) implicit hereditary responses (endocrine secretion, circulatory changes, etc.). All these subdivisions are dealt with in detail in separate chapters.

In the chapters devoted to hereditary modes of response—emotion and instinct—the author furnishes an account of various interesting investigations of his own. He suggests as a result of his observations that *fear*, *rage* and *love* (using the last in the Freudian sense) are the emotional reactions belonging to the original nature of man. He explains, however, that he uses these terms with some hesitation, and he states that he would be willing to call them "emotional reaction states X, Y and Z." The subject is throughout dealt with in terms of situation and response, and subjective terms such as "feeling," "affection," "impulse," "need" and so on, are not referred to or utilised in any way.

Memory is here defined as "a general term to express the fact that after a period of no practice—explicit bodily habits, explicit word habits—the function is not lost but is retained as part of the individual's organisation, although it may, from disuse, have suffered from greater or lesser impairment" (page 304). A special chapter is devoted to language, speech being "explicit language habits," and thought, which is here re-defined in conformity with behaviouristic psychology, is described under the heading of "Implicit language habits" or "sub-vocal talking." The final chapter deals with "Personality and its disturbance," and is thus concerned with the "totally integrated individual in action," which the student is in a position to understand, having been made acquainted with the "necessary part activities, such as instinct, emotion and habits," in the preceding chapters. The suggestions given for the study of personality are along the lines of the

personality studies of Hoch and Amsden, with which psychiatrists are, of course, familiar.

In commenting generally on this book it would seem that the fundamental doctrine of the "Behaviourist" is that man can best be understood by what he does—including what he says—rather than by what he thinks. This is expressed clearly in the paper already referred to, and from which perhaps a quotation may again be made: "We watch what the animal or human being is doing. He means what he does. It is foolish to ask him while he is acting what he is meaning. His action is the meaning. Hence, exhaust the concept of action and we have exhausted the concept of meaning. It is a waste of effort to raise a problem of meaning apart from actions which can actually be observed. To answer what the Church means to men it is necessary to look upon the Church as a stimulus and to find out what reactions are called out by this stimulus in a given race, in a given group or in any given individual. Parallel with this query we can carry out another as to why the Church calls out such and such responses. This might take us into folklore and into the influence of the code upon the individual, into the influence of parents upon children, causing the race to project the father and mother into a heavenly state hereafter, finally into the realms of the incest complex, homosexual tendencies, and so on. In other words, it becomes like all others in psychology, a problem for systematic observation and experimentation." A certain amount of introspection is allowed as necessary under certain circumstances by the Behaviourist, but it is not really encouraged. Thus, referring to fatigue (page 351): "It is quite another problem but again worth while to specify the condition of the worker from time to time. For example, at the end of the fourth hour he may have become dizzy, nauseated or complained of headache. The position we take here is not at all incompatible with studying the individual's organic condition from moment to moment or even with recording his verbal complaints." The attitude towards thought taken by the Behaviourist is quite clear. It is no more than complex behaviour. "It is not different in essence from tennis-playing, swimming or any overt activity, except that it is hidden from ordinary observation, and is more complex and at the same time is more abbreviated as far as its parts are concerned than even the bravest of us could dream of. . . . Thought is highly integrated bodily activity" (page 325). The aim of the Behaviourist is thus to study thought, not as the introspectionist does by analysing its content, but by the delicate instrumental study of the bodily activities of which it is the expression—or rather, perhaps, which it actually is.

All this cannot fail to raise discussions which are far beyond the scope of a review. Such questions as these naturally arise in the mind—Why then is there such a state as consciousness? What is its function? Can the individual be adequately explained apart from the fact of self-consciousness? Is the behaviourist method adequate to explain all the psychological problems we have to meet, or is it not, at present, only limited in its scope? Can we afford to dispense with all that is included under such terms as "need," "impulse," "feeling," "cognition" and so on? Whatever answers we may be inclined to give to these questions, and however we may feel that the study of mental content and function

is legitimately and necessarily included within the scope of psychological investigation, it is quite clear that the purely behaviourist approach will yield results of much value to the understanding of human conduct. Though behaviourism may neglect readily accessible factors which enable us to understand ourselves and other people, yet it will undoubtedly exert a beneficial influence upon psychology even when the latter is approached from a different and more conventional angle. That it has already done so is abundantly evident.

The atmosphere of the book is extremely business-like and practical. Prof. Watson allows himself to be influenced by no preconceived opinions; he must have objective evidence; and he allows no sentimental consideration to interfere with a frank expression of his view. He is always clear, concise and to the point. However much his views fail to find acceptance they certainly cannot be neglected by those who are concerned with the study of human behaviour. H. DEVINE.

(1) "Is Thinking merely the Action of Language Mechanism?" *The British Journal of Psychology*, October, 1920. A valuable symposium on "Behaviourism," with contributions from F. C. Bartlett, Miss E. M. Smith, G. H. Thompson, I. H. Pear, A. Robinson, J. B. Watson.

La Meccanica del Cervello e la Funzione dei Lobi frontali. [The Mechanism of the Brain and the Function of the Frontal Lobes.] By Prof. LEONARDO BIANCHI. Turin: Fratelli Bocca, 1920. Medium 8vo. Pp. 431, with 61 illustrations and 4 diagrams.

In this volume Prof. Bianchi presents us with a very valuable contribution to the literature of cerebral structure and function. It contains a wealth of scientific material and many original observations. For about forty years Prof. Bianchi has been actively engaged in the investigation of the problems of cerebral evolution and cerebral localisation. He has brought forward many facts of an experimental, clinical, anatomico-pathological and cytological character. His views have not always met with general acceptance—indeed, they have sometimes been severely criticised, but Prof. Bianchi has always replied with calm assurance, widening the scope of his observations and bringing forward fresh proofs in confirmation of his views.

Chapter I deals with the evolution of the nervous system and the cerebral localisations. In his interpretation of the mode whereby external stimuli become transformed into psychic products, Prof. Bianchi shows the modern tendency of physicists to regard the various manifestations of natural energy as forms of one single force, controlled by identical laws. He speaks of the deformation and the elastic vicissitudes of ether, and of electric dissociation consisting in the separation of negative electrons from neutral atoms—a separation which would explain the chemical mutations of bodies. Reactions in the lower living organisms appear to be of a chemical, physical, or mechanical nature. Even after the appearance of the nervous system, many phenomena regarded as psychic in character are really nothing more or less than tropisms. Psychic or mental characteristics only come into the scene when we have the intervention of sensations and associative memory. Briefly put, evolution of mind takes place *pari*

passu with increased number and differentiation of the nervous elements, and so with the successive differentiation of motions and adequate adaptations. Tropisms, reflexes, automatisms, and intelligent reactions represent successive stages in an unbroken evolutionary process. After a rapid review of the process of evolution as affecting the reflex movements and automatisms in relation to the newer formations of the cerebral cortex, the author shows how the *functional processes of pre-existing nervous organs are absolutely indispensable for the elaboration of the more complex psychic products of the organs of more recent development.*

Tracing the evolution of the nervous system throughout the animal scale, we can see an increasing differentiation of its parts, and the cerebral cortex shares in this differentiation as much as any other part of the nervous system. Division of labour and co-operation of labour are two outstanding features of nervous functioning. Thought is always the effect of a very extensive cerebration. It cannot be localised, although the elements from which it results are localisable. The author insists upon the view he held for many years, that localisation is to be understood in the sense of an unbroken chain of processes, each of which has its own organ, all of them being functionally and anatomically related with one another. If any one area is thrown out of gear this is not without effect upon the function of other areas of a higher order. The same applies to intelligence, which is a product of the function of the entire brain. The phenomena of intelligence are not co-extensive with the sensory and motor areas alone. Clinical experience and experimental investigation have demonstrated the existence of other areas which are neither sensory nor motor, and on this Hitzig based the possibility of there being special cerebral areas concerned with the higher mental functions. The observations and experiments carried out by Bianchi throughout a number of years have convinced him that there really exists a "centre of centres" which effects a more extensive association of the products of perception and the more complex psychic products derived from these. He has long held the opinion that the sensory regions have no fixed limits, but rather are capable of considerable extension and evolution—a view that has been confirmed by subsequent clinical and histological investigations.

He deals extensively with Flechsig's view regarding associative areas, and shows how Flechsig's evolutionary cerebral geography cannot be made an unexceptionable basis of a psychological geography. In this opinion he is supported by the results obtained by Dejerine and Monakow in their investigations by the method of degenerations—results which conflict with the views of Flechsig. With regard to the value to be assigned to Flechsig's posterior associative zone, he points out that this region has an essentially visual function in its occipitoparietal portion and an auditory function in the temporal portion. He asserts that there are few if any regions of the cerebral cortex that possess such numerous and extensive relations with the rest of the brain as the first left temporal convolution—relations that are intimately bound up with the movement of thought and of psychic manifestations. Dealing in particular with the inferior parietal lobule, which represents

a part of Flechsig's great posterior associative zone, he reports several cases illustrative of the parietal syndrome which go to prove that alexia is due to lesion of the parietal zone; that, so far as intelligence is concerned, the effects vary considerably according to the degree of culture and education of the patient, being of little moment in those who have not learned to read and write, but very outstanding in the highly cultured. The important point upon which Bianchi lays stress is the fact that the amnesia and intellectual enfeeblement associated with lesions of the inferior parietal lobule are to be explained by the fact that the area in question forms a part of the zone of language, and not because it is a part of Flechsig's posterior associative zone. He argues that lesions in the inferior parietal lobule should present a uniform symptomatology if it were really an associative area in the sense of Flechsig, and we know that this is not the case. Bianchi holds that the area of the graphic images represents a mechanism of very great importance in the formation and movement of thought in educated men, and if this mechanism be destroyed the intellectual capital cannot be reproduced in language. Clinical as well as anatomical facts invalidate Flechsig's conception. Similarly in the case of the temporal lobe (also a part of Flechsig's posterior associative zone) the author cites cases followed to the *post-mortem* room, which go to prove that any intellectual disturbances following lesions of this lobe are related to the physio-pathological mechanism of language. This finding is also contrary to the view of Flechsig, who regards his posterior associative centre as the organ of positive cognition and imaginative activity. The author points out that the temporal lobe contributes to the development and manifestation of intellect not only with auditory images but especially with speech and language, which exercise an enormous influence upon the structure and potency of intellect.

As regards the tactile sphere, the author agrees with Flechsig in regarding it as the field where arrive the sensory impressions from all parts of the body, so that it really becomes the nucleus of the kinæsthetic sense.

After reviewing the present state of our knowledge regarding the motor area, the author maintains that the pre-Rolandic region is to be regarded as an evolutionary motor zone in the sense that it represents the field of extrinsication of motor activities of a higher and more spiritual kind in more evolved men. One example is to be found in the motor area of articulate speech at the foot of the third frontal convolution. These areas are still in course of evolution and are not differentiated alike in all men. The author concludes that the great occipito-parieto-temporal area is not to be regarded as a great intellectual centre in the sense of Flechsig, but rather as an extensive area of evolution of the primary visual, auditory and tactile areas.

Chapter II deals with the chronology and evolution of the doctrine concerning the functions of the frontal lobes. The author refers to the results of his early experiments and to the criticisms with which they were received. He gives a very interesting and critical exposition of the whole subject, and points out that several of his old opponents, Flechsig amongst others, have subsequently expressed views that are in agreement with his doctrine, and have had to admit that extensive lesions of

the frontal lobe bring about a profound alteration of character. In the case of experimental lesions that have not been followed by conspicuous intellectual disturbance, it has been found on *post-mortem* examination that very little of the frontal lobe had been removed.

Chapter III deals with the evolution, morphology and structure of the frontal lobe. The author traces succinctly the development of the frontal lobe throughout the zoological scale up to man, and shows how the progressive growth of the frontal lobe maintains a certain parallelism with that of intelligence. From the dog up to man the increase in the frontal lobe becomes always more marked, so that it almost seems a new region as compared with other parts of the cerebral cortex. The latter also develop and become larger, but do not compare with the frontal in proportionate development. In dealing with cytoarchitecture the author makes reference to the more recent findings, such as those of Campbell and Bolton, and expresses the opinion that these are not yet sufficiently harmonious and well established to permit of our founding any hypothesis upon them.

In Chapters IV and V the author describes the methods followed in his researches, and gives the clinical histories of his experiments upon dogs, foxes and monkeys. One cannot help being impressed by the results of these experiments, which were conducted with rigorous precautions, and undoubtedly serve to illustrate the nature of the cerebral mechanisms and the function of the frontal lobes in particular. His experiments upon monkeys are particularly striking, because, after they had been trained and had acquired new adaptations, they were subjected to mutilation of the frontal lobes, with the result that the difference between their subsequent behaviour and their condition prior to operation was very marked and easily appreciated. The author proves distinctly that *damage to one frontal lobe alone does not produce very marked changes. Alterations in character and conduct are conspicuous, however, when both frontal lobes are injured, more especially if the left frontal lobe be largely involved.*

Chapter VI deals with the excitable area of the frontal cortex and its signification.

In the course of his experiments on monkeys the author was able to define a narrow strip of cortex containing centres for movements of the head, eyes, pupils and ears, situated somewhat in front of the ordinary motor centres and separated from these by a narrow, inexcitable zone. He puts forward the view that these movements are on a somewhat higher level than the ordinary muscular movements, being intimately bound up with the process of attention. Experiments upon the human subject also seem to indicate the existence of a centre for dilatation of the pupil in the frontal cortex.

Chapter VII is devoted to the study of associative paths connecting the frontal lobe with the sensory cortical fields.

Chapter VIII, on "Intelligence and Language" presents a series of important psychological conceptions. The whole mental structure is shown to rest upon association, which consists in the connections which are established between ideas, emotions and movements. The scientific conception which we form of the mechanism of intelligence is inseparably connected with that of language in its more evolved

aspects. All the sensory areas of the cerebral mantle must be regarded as intellectual fields of language. They have developed *pari passu* with the development of language.

To this chapter is appended a brief but interesting article on logic in relation to intelligence.

Chapter IX is devoted to the study of the origin and mechanism of the emotions and sentiments. It represents a very important chapter in psychology which cannot well be summarised in a short review. Suffice it to say that the author's views are characterised by deep penetration and supported by convincing arguments. He holds that the pleasant or unpleasant nature of emotion depends precisely upon the character of the image which occupies the focal point of attention. Organic manifestations of emotion and consciousness are strictly bound up with one another, but the external manifestations of emotion may exist apart from any consciousness of emotion. Emotions and sentiments have their roots in the kinæsthesia, which, again, is the essential nucleus of the personality. They are nothing more or less than grades of states of consciousness with more or less conscious reflexes. In well-evolved minds, thought and sentiment are always in harmonious combination. The author makes it clear that the higher emotions and sentiments are very intimately dependent upon the integrity and development of the frontal lobes. He devotes considerable attention to the social sentiment, which he clearly distinguishes from social instinct. Both in imbeciles and in monkeys that have suffered mutilation of the frontal lobes, deficiency or suppression of this sentiment is a constant feature. Regarded either from the ontogenetic or phylogenetic point of view, it is one of the last sentiments to develop, and it shows a progression that is parallel with the development of the frontal lobes. Disease of the frontal lobes in the human subject and removal of these lobes in monkeys leads to dementia, which is characterised by lack of interest in the surroundings and absence of the social sentiment, whilst the primary emotions, the appetites and the instincts may still remain.

Chapter X deals in an interesting and instructive fashion with consciousness. The author points out that this is not a faculty, although it is in constant evolution. It is vain to inquire where in the scale of life consciousness makes its first appearance. He recognises a lower (or sensory) and a higher form of consciousness. The higher form of consciousness involves the element of comparison and contrast, and all the evidence goes to show that it comes upon the scene with the first appearance of the frontal lobes, and it evolves with the development of these. The author's arguments are sound and convincing, and this chapter is undoubtedly a notable contribution towards the elucidation of a very difficult subject.

In a long foot-note the author reviews briefly the modern theories of the subconscious and the unconscious as revealed in the doctrines of Freud and Jung, and expresses the opinion that, so far, they have contributed nothing of a positive nature to our knowledge.

J. H. M.

Ueber die Juvenile Paralyse. By Dr. TONI SCHMIDT-KRAEPELIN.
Berlin: Julius Springer, 1920. Pp. 124, with 9 illustrations.
Price 24 marks.

The value of this book will be apparent from the fact that it provides an elaborate study of all the thirty-nine certain cases of juvenile general paralysis among the 2,184 admissions to the Psychiatric Clinic at Munich in the last fifteen years. Twenty-six of them were males and thirteen were females. To these are added eight cases that were doubtful or anomalous, or in which an erroneous diagnosis was made, and seven cases (some of them from the Kinderklinik) of "pre-paralysis"—children who showed no clinical signs of any metasyphilitic affection of the central nervous system, but in whom serological findings characteristic of general paralysis were more or less accidentally discovered. *Post-mortem* appearances are only very briefly referred to, but the clinical aspects, serology, ætiology and family history have been dealt with in a very searching manner. The discussions under these various heads are liberally besprinkled with allusions to the findings of other investigators, so that the book takes on much of the character of a text-book. Lucidly written and well arranged to permit of easy reference, it is also just the sort of book to stimulate the scientific curiosity of any who have juvenile paralytics under their observation and care. A bibliography is appended giving ninety-nine references to the most recent literature.

Among the multitude of matters dealt with, we may mention a few miscellaneous points of special interest. As regards the serology of the relatives of juvenile paralytics, results are given of the examination of 48 persons belonging to 21 families. A positive blood Wassermann reaction occurred in 5 out of 11 fathers examined, in 14 out of 18 mothers, and in 9 out of 19 brothers and sisters; in 9 instances it was the only evidence of previous infection. Insane heredity is not particularly common in the families of these juveniles, but alcoholism of parents was noted in 20 *per cent.* of the cases. As regards the tendency which other observers have found for a predisposition to general paralysis to be inherited by offspring of the same sex, these Munich statistics provide little evidence; but in two cases—one of each sex—general paralysis occurred in the fathers, and in one female case it occurred in the mother. In reference to the preponderance of males among these Munich cases, the author quotes other evidence to show that juvenile paralysis does really occur more frequently in males, in a way that is unintelligible if congenital syphilis is the only ætiological factor of importance. The birth-rate in the families of juvenile paralytics is, on an average, considerably higher than in the families of adult paralytics. In an investigation of the fruits of 40 marriages, 286 pregnancies were counted (including, however, 25 half-brothers and half-sisters); they yielded 33 miscarriages (mostly about the fifth or sixth month), 14 stillbirths, 21 premature children who did not survive, 91 children who died in infancy, 3 who died later, 9 sickly children, 6 feeble-minded, 69 children (including 10 half-brothers and half-sisters) who were living and healthy at the time of the inquiries, and the 40 who had become juvenile paralytics.

Over one-fourth of these paralytic children showed general arrest of development (infantilism). About a third were mentally deficient. The early symptoms of the disease are usually an arrest of growth and an alteration in the character of the individual. Comparing these juvenile cases with cases of adult general paralysis, the author finds that acute onset, hemiplegias and other focal symptoms and major epileptiform attacks are relatively frequent; they suggest a combination of the disease with brain syphilis—a combination which is often recognisable both clinically and anatomically. Optic atrophy, without other tabetic symptoms, is comparatively frequent. Total immobility of the pupils is commoner than simple loss of the light reflex. As a forerunner of the characteristic speech disorder, there is sometimes observed, in paralytic and in pre-paralytic children, a peculiar, hurried, toneless and puffing way of speaking. Periods of excitement are common in all stages of juvenile paralysis, but an agitated condition persisting throughout is seen in only about 10 *per cent.* of cases. A condition resembling *delirium tremens* is sometimes observable, even in the absence of alcoholism. Increase of abdominal fat, with decrease of fat in other parts of the body, appears often to occur.

A majority of the cases showed "typical" Wassermann reactions in the blood-serum (+) and in the cerebro-spinal fluid (+ — +). A weak reaction in the fluid seems to be associated with a long duration of the illness. In a case in which subsequent microscopic examination of the brain showed a combination of general paralysis with cerebral syphilis, the fluid gave a Nonne phase-1 opalescence, 16 cells per cubic millimetre, and a Wassermann reaction that would be typical for a brain syphilis uncomplicated by general paralysis (0 — +); the reaction in the blood was all but negative. These anomalous reactions may perhaps be explained by the fact that in this case there were extreme rachitic changes in the bones. A non-syphilitic meningitis (*e.g.*, tuberculous) occurring in a congenitally syphilitic individual may lead to the development of a positive Wassermann reaction in the fluid, though there are no syphilitic or metasyphilitic brain changes; the inflamed condition of the meninges permits the passage of antibodies that otherwise would be present only in the blood. Biological findings characteristic of general paralysis are met with in some cases of brain syphilis, and also in some congenitally syphilitic children who appear to be quite healthy. Such findings are probably to be regarded as the first indication of a paralytic disorder that will develop later.

A longish list is given of modern methods of treatment applied in these Munich cases. In one case injections of living cultures of the spirillum of relapsing fever were used, followed by salvarsan; the rationale is ingenious, but the benefit was *nil*. The author says flatly that no therapeutic results worth mentioning are obtainable by any known method of treatment.

SYDNEY J. COLE.

Part III.—Epitome of Current Literature.

1. Psychology and Psycho-pathology.

Psychology and Industry. (Brit. Journ. of Psychol., March, 1920.)
Myers, C. S.

The experimental approach to psychology is distinguished from the observational methods by having a most complete freedom from metaphysical preconceptions and aims, and by a more perfect control of attendant conditions. It enables us to study *individual* mental differences, *racial* mental differences, *generic* mental differences, and the relation of unconscious processes to consciousness. The results obtained and the methods themselves are now being applied to education, medicine and industry. Experimental psychology can be applied to fatigue, movement study, and vocational guidance and management in the study of industrial problems.

Fatigue.—The psychologist has studied the problem of mental as well as muscular fatigue, of the effects of drugs, and of rest pauses of different lengths.

Movement study.—The present methods of approach are largely empirical and guess-work. In many occupations there are seemingly needless movements. Time may be saved by "shorthand" methods, but experiments must be devised to establish the question of whether there is any increase, no increase, or decrease of fatigue. More work is needed to yield information in regard to the optimal load and posture, the optimal rate and frequency of lift, etc., in persons of different muscular power, age and sex. The study of *vocational guidance* is founded on that of individual differences. In a certain bicycle-ball factory it was found that after the selection of the best workers as indicated by reaction tests, 35 individuals could do the work of the previous 120, and that the accuracy of the work was increased by two-thirds. Hearing, vision, speech, memory for figures, memory for the order of instruction received, accuracy, neatness, distractibility, powers of observation, of accuracy and speed of reasoning are capable of experimental estimation. By the aid of properly devised tests applied by trained persons those leaving school could be helped and usefully advised in their choice of a suitable vocation, and by their application to industrial candidates the fittest could be speedily selected. Information in regard to the "character"—perseverance, honesty, courage, etc.—of the subject is incidentally gained from tests systematically and individually applied. Under the application of psychology to *management* the writer includes the consideration of the psychological causes of industrial discontent and restricted output, the psychological advantages of different methods of payment and supervision, and other conditions which affect the efficiency and happiness of the workers. We understand now more fully the importance of the emotions, how they give rise to worry, anxiety, rationalisation, and by the mechanism of "projection" to delusions of suspicion and even persecution. The importance of the application of these new advances to the problems of industrial unrest is obvious.

C. W. FORSYTH.

The Psycho-galvanic Reflex: A Review. (*Brain*, vol. xliii, Part 1, May, 1920.) *Prideaux, E.*

For further investigations into the psychological study of the psychogalvanic reflex a very good case has been made out. It would seem that we have in this reflex a valuable objective sign, which may help in the elucidation of many unsolved problems in psychological medicine, and which we cannot afford to disregard. As a good general introduction to the subject, and as a useful survey of the history and present position of knowledge concerning it, this paper of twenty-four pages may be commended. The headings of its sections may be quoted: "Apparatus Employed," "Phenomena of the Reflex," "Nature of the Reflex as a Physical Problem," "Physiological Processes concerned in the Causation of the Reflex," "Clinical and Psychological Study of the Reflex." Its use as a "complex" indicator, and its behaviour in hysterical anæsthesia, in the hypnotic state, and in certain psychoses, are discussed. A bibliography giving fifty-three references is appended.

SYDNEY J. COLE.

A Psychological Interpretation of Essential Epilepsy. (*Brain*, vol. xliii, Part 1, May, 1920.) *Clark, L. Pierce.*

This interpretation of essential (genuine, idiopathic) epilepsy presupposes a characteristic mental constitution, independent of any deterioration that may result from fits. In all epileptics, sane or insane, there is an affective disorder—an inherent deficiency in the mental make-up. That it is from this that the emotional and intellectual deterioration gradually proceeds is observable long before the first fit. The convulsive stage is but a further unfolding of the original make-up.

This make-up is revealed in the defects of adjustment at the several epochs of stress. In infancy the potential epileptic is, from birth, fretful and irritable. As time goes on, he proves disobedient and unmanageable. With these behaviour defects there is a hyperactivity of physical and intellectual development. His mood is highly changeable—one moment contented, the next irritable beyond appeasement. Continuity of purpose is lacking in his play, and he cannot for long be amused. At school he is little amenable to discipline. His interest and attention vary. Brilliant in some subjects, he is grossly backward in others. His adjustment to his environment being incomplete and unsatisfying, he becomes self-important and sensitive. Childhood is thus a period fruitful in stresses, and fits often begin then.

At puberty, adjustment to work and to social demands becomes increasingly burdensome. The potential epileptic will not take a proper attitude of apprenticeship. The requirements of interdependence and subordination to a main purpose irritate him beyond endurance. He is selfish, moody, irascible, and inclined to think he is persecuted. Now begins a habit deterioration, partly protective; he eases the stress by evading the exactions of strict behaviour. So we see, not fits as yet, but various dissipations. Having no intimate friends he is a free-lance, eager to work his will upon the world and largely able to do so. Social

trammels being in great part shaken off, his intellectual efforts run with less stress than the normal, but in the consummation of his task the influence of social and family custom fails as a directing force. Thus new hindrances arise, which wear down his invulnerability, till at last some trivial stress appears to be the precipitator of a frank epilepsy. The main reason why most epileptics are unmarried is not that fits are a bar to marriage, but that the epileptic rarely has the character-equipment for marriage. Emotionally and sexually he rarely develops beyond the level of puberty; he lacks the tenderness of feeling and the capacity for self-sacrifice characteristic of adult love.

The muscular convulsion is comparable to the impulsive movements of the foetus and infant, which become slowly inhibited by voluntary control at the end of the nursing period. The motivation of these impulsions is unconscious; they occur even in brainless embryos. The loss of consciousness in the epileptic fit is, psychologically, a protective mechanism—a retreat to an early stage in development, permitting a revival of the foetal impulsions.

Treatment consists, not in the drugs beloved of text-book writers and general practitioners, but in an intensive educational training designed according to the defects and capabilities of the individual.

SYDNEY J. COLE.

2. Neurology.

Fissural Pattern in Four Asiatic Brains. (*Journ. of Anatomy*, vol. lvi, Part 4, July, 1920.) Cole, S. J.

The brains in this research are Chinese, Japanese, Goanese, and Arabian respectively, and the specimens were obtained from the racial series in the museum of the Royal College of Surgeons. The drawings included in the paper are prepared according to the method employed by the author in his study of three Chinese brains in the *Journal of Anatomy*, 1911. The picture of the mesial and basal surfaces are tracings from photographs, modified only so far as to indicate, by a slight break in the line of the sulcus, the presence and position of any bridging sulcus contained within it. A different method is adopted for the picture of the convex surface, which not only gives indication of deep gyri, but departs so much in another respect from photographic outline that it becomes "a sort of Mercator's projection," after Kohlbrugge's manner. Cole indicates that without this method, which he describes in his introduction, a comprehensive record of the fissural pattern could not be given without cumbersome and costly multiplication of pictures from numerous points of view.

H. DEVINE.

A Case of Myasthenia Gravis. [*Un Cas de Myasthénie Paralytique.*] (*L'Encéphale*, July 10th, 1920.) Claude, H., and Porak, R.

Immediately after an attack of "influenza" (?) which kept him from work for 8 days, a man, æt. 53, complained of diplopia and tinnitus aurium, with general weakness and susceptibility to fatigue, increasing during the next two months. There was also double ptosis. The limbs showed no actual paralyses, and the tendon reflexes were

unaltered. Electrical examination showed no myasthenic reaction or reaction of degeneration. Apart from the tinnitus there was no sensory disturbance. Pulse 90. Arterial pressure raised (20-12 Pachon). Treated with pituitary and suprarenal extracts he improved, until the tenth month, when there was a return of ptosis and diplopia, with defect of speech-articulation, difficulty in raising the upper lip, and weakness of the palate; fluids came back through the nose. The tendon reflexes were now exaggerated. Pulse 104. Pressure 14-9. Head-ache, depression, and delusions of persecution were absent. Breathing became increasingly laborious, and the patient died, 11 months after the onset of the illness.

Post-mortem examination revealed a tumour of the thymus, the size of a duck's egg (primary epithelioma). The four parathyroids were enlarged, each being as big as a large pea: they contained much colloid and many eosinophile cells, indicating a functional hyperactivity. Pituitary lesions (increase of volume and of pigment) were confined to the posterior lobe. The suprarenals were well developed; combined weight, 20 gm. In the nuclei of the pons and medulla there were fine cell-changes of doubtful significance.

SYDNEY J. COLE.

- (1) *Inscriptions of Speech.* (*Volta Rev.*, July, 1920.)
- (2) *Ataxia, Asaphia and Apraxia in Speech.* (*Fourn. Neurol. and Psychopathol.*, August, 1920.)
- (3) *The Nature of Epilepsy.* (*Proc. Roy. Soc. Med.*, 1920, vol. xiii (*Psych. Sect.*), pp. 18-23.) *Scripture, E. W.*

In his address at Cambridge in July last Dr. Henry Head said that disorder of articulation was one of the earliest manifestations of nervous disease, though it frequently passed unnoticed by those in contact with the patient. Fortunately the emotional effect produced by the physician's interview sometimes enabled the latter to discover the defect in the speech.

It is interesting to find that Dr. Scripture has brought forward a method by which he is able to detect disturbances of speech, although some of the cases showed no voice change that could be discovered by the patient or anyone else. The patient speaks into a wide tube ending in a flexible membrane. The vibrations and puffs of air passing down the tube cause the membrane to move, and these movements are recorded by means of a light lever on the smoked surface of a revolving drum. Ordinary voice sounds, as shown by the inscription, are composed of puffs or breaths of air, of interruptions of the air-current, and of vibrations.

Normal speech depends upon the integrity not only of various muscles, but also of the motor and sensory innervation and of the centres concerned. Impairment of any of these is liable to cause disorder of speech and to modify the voice inscriptions. Thus it was found that a single syllable like "pa," spoken respectively by cases of muscular dystrophy, bulbar paralysis, disseminated sclerosis and neurasthenia, produced inscriptions readily distinguishable not only from that of the normal voice but also from each other.

The sudden jerks and irregularities that are observed in the inscrip-

tion of a case of disseminated sclerosis are caused by the intention-tremor of the crico-thyroid muscle (innervation ataxia). The want of control of single muscles (ataxia) is in contrast with the want of control of constant types of movement (asaphia): in an inscription by a paretic who was asked to repeat "Peter Piper's peppers" the occlusions for the "p" varied considerably in length and the explosions differed in strength. The irregularity was in the agreement of the type of the sound to be regarded as a correct "p." In "apraxia" there is a loss of control of complex movements: "the praxic centres prescribe whole words, phrases and expressions in speech."

The author has also made a special study of the inscriptions of speech in many cases of epilepsy. To the ordinary eye no difference from that produced by the normal voice could be seen; when, however, measurements were taken with a micrometer microscope certain peculiarities were discovered.

To quote the author: "The vowels and vibrating consonants appear in the inscriptions as series of fine waves. The length of each wave is measured, and the results are plotted on cross-section paper. A long wave is the registration of a low tone of the voice and a short wave of a high tone. A line drawn through the series of dots thus gives the rise and fall of the voice, or the melody of the words spoken. It is termed the *melody plot*.

"The melody plots for normal speech show that the voice is continually rising and falling; it is never steady on the same pitch for an instant. This is quite independent of the general melody of the phrase; whether the person speaks with rising or falling inflection, or with great or little modulation of the general melody, he also shows this finer fluctuation or flexibility of melody.

"The melody plots for epileptic speech, however, show a diminution or an absence of the finer fluctuations. The melody lacks flexibility. To the ear the speech sounds expressionless or wooden. With little difficulty the ear can be trained to detect this peculiarity."

This inflexibility of melody observed in the epileptic is in marked contrast with the over-flexibility noted in cases of hysteria, and the phenomenon may be found useful in differential diagnosis. It is a known fact that it is not always easy to distinguish between the epileptic and the hysterical fit. Thus it would appear that the inflexibility of melody is more to be relied upon than the actual fit in making a diagnosis between the two conditions.

Scripture finds that the new view of epilepsy put forward by Pierce Clark is quite in accord with his own observations on the speech in epileptics. According to Clark epilepsy is essentially a disease of character, the predominant feature being inflexibility of temperament with a failure of adaptation to the environment. Even the convulsive attack is a reaction away from the stress of reality—the patient withdrawing himself from a too-demanding environment by a temporary lapse into unconsciousness. According to this theory the inflexibility of melody, so remarkable in the epileptic, would be an outward expression of the epileptic's attitude towards his environment.

NORMAN R. PHILLIPS.

Comparative Studies on the Growth of the Corpus Callosum.—I. On the Area of the Corpus Callosum, measured on the Sagittal Section of the Albino Rat Brain. (Journ. of Comp. Neurol., vol. xxxii, No. 1, August, 1920.) Suitsu, Nobuharu.

Absence or disease of the corpus callosum in man is often attended by idiocy or mental enfeeblement. Its area in sagittal section has been stated (Spitzka, Cameron) to be unusually large in individuals of recognised intellectual ability. Whether this is true or not can only be made certain after a more complete study of the growth of callosal area in man, considered in relation to the recorded brain weight and the abundance of the convolutions. As a first step towards further knowledge, the author has studied the growth between birth and maturity of the median sagittal sectional area of the callosum by observations on seventy-six albino rats, all from the rat colony of the Wistar Institute. Using planimeter measurements of Leitz-Edinger projections (magnification 20 diameters), he finds that the relation between growth of this area and growth in body weight may, for this animal, be expressed by the curve

$$y = 0.184 + 0.0003x + 2.08 \log x$$

in which y is the area in millimetres, and x the weight of the body in grammes. Calculating the brain weights from the body weights by the formula

$$Br. W. = 0.554 + 0.569 \log (body\ weight - 8.7)$$

he obtains expressions for "total brain area" as the square of the cube root of the brain weight (variations in specific gravity being thus ignored). With the curve for callosal area, given above, he is now in a position to compare a curve for total brain area, each of the two curves exhibiting a relation to body weight. The comparison shows that the growth of the callosal sectional area is slower than that of the total brain area. This relatively retarded and protracted growth of the callosum he elucidates by interesting observations on its myelination. He has also investigated the growth of the callosal area in relation to age, and the thickness of the callosum at the genu, truncus and splenium in relation to age. He adds comparisons with some measurements of human callosa, but the human data are as yet too few to prove much.

SYDNEY J. COLE.

3. Clinical Psychiatry.

Three Cases of Larceny in which the Anti-social Conduct Appeared to Represent an Effort to Compensate for Emotional Repression. (The Amer. Journ. of Ins., January, 1920.) Spaulding, E. R.

These cases, all in women arrested for larceny, are exhaustively described. In each there was much emotional disturbance with neither outlet nor adjustment; a hidden conflict existing for periods of seven to sixteen years; and total ignorance of the sex-life with fear of knowledge regarding it. In two was exhibited repressed desire with sense of guilt and shame centred about early emotional experiences; in

the third the non-realisation of childhood's dreams. One was sub-normal mentally, two superior normals; but in all three immaturity was present as regards effort towards the minor adjustments of everyday life and the conception of adult problems and responsibility.

The first had originally obtained outlet and compensation through religion; when this failed release through sex satisfaction was denied because of her emotional reactions. Stealing represented to her an act of moral suicide and was adopted in her endeavour to gain religious restoration. The act of delinquency was incompatible with her former career, and immediately after its commission was not remembered. Her sex consciousness was first aroused at the age of 7 by a male music teacher and caused the concealed sense of guilt repressed for sixteen years; a subsequent sexual experience when 19 had little influence on her. The early conflict alone decided her delinquency—when circumstances of strain arose. Of great interest is the fact that this case, although of institutional type, immediately responded to analysis, with the probability of complete emancipation.

The next case had been allowed complete mastery of her father till the age of 18, when the strong exercise of parental authority created an intolerable position, expressed as a compulsion neurosis. A hasty and unfortunate marriage was contracted as a way of escape, in spite of the fact that filial relationship had hitherto so satisfied her as to have been adopted as the permanent life attitude. The marital adjustment could not be made, and the adoption of a child was sought in vain. When a child she had stolen stamps from her father, and now anti-social conduct developed in extensive shop-lifting, the articles being simply concealed and accumulated. In the analysis confidence was only obtained after many months. A satisfactory reconstruction was made on the lines of interests aroused in childhood by the literary accomplishments of her father. It is noted, in passing, that the creative element in writing often amply replaces the maternal instinct.

The last case illustrates sex consciousness developed at an early age by excessive love for her father. Associated with it grew a feeling of intense shame, resulting in the absolute repression of anything connected with the sexual realm. The conflict emerged in lying, unmanageability, truancy from home, and especially stealing. The compulsions arose from no actual present crisis, but from the obsessive thoughts based on past situations, *viz.*, the experiences with her father.

In two of these cases then the repressed conflicts and the delinquencies, although closely connected, were widely displaced in point of time. Healy has reported similar results from mental conflict, but intimate in time relationship. In all the above cases wise guidance during early life would have prevented antisocial conduct. Delinquents may possibly be re-educable—but the opportunity for constructive work lies in the recognition and treatment of mind conflict or maladjustment at its inception.

J. GIFFORD.

War Psychoses: Dementia Præcox in War-time. (Rev. of Neurol. and Psychiat., November–December, 1918.) Henderson, D. K.

The writer maintains that war psychoses are essentially the same as those occurring under peace conditions, the symptoms being similar,

except that the content of the psychoses has taken on an environmental colouring. The stress of military service has simply acted as a precipitating factor, and has brought forth those latent trends in the individual predisposing him to a particular type of mental disturbance. *Diagnosis*: The vast majority of the author's cases showed a dementia præcox reaction or were mental defectives. The varieties of dementia præcox were not clear-cut—67 *per cent.* showed an hallucinatory paranoid state, 14 *per cent.* were hebephrenias, 11 *per cent.* were catatonias, 7 *per cent.* showed an emotional blunting without any special trend, and one was ungrouped. There has been much discussion about the hallucinatory paranoid states; some, because of the transitory nature of many of the cases, thinking that they are the direct result of the war situation. Whether these cases recover or not, it is plain that they have made an inadequate reaction to the situation of a dementia præcox type. What has been attempted is to diagnose the case in relation to its reaction type. The broad view is that of Meyer, who holds that the whole point is "to get the facts concerning the total reaction, or reaction type, or reaction complex, whether it is organic or toxic-delirious, or affective or paranoic, or a benign, or a malignant substitutive process, or a constitutional defect or perversion, or a mixture." *Ætiology*: Meyer and Hoch have pointed out that the inherent defect in the dementia præcox case is his inability to satisfactorily meet his difficulties. Hoch has shown that dementia præcox tends to develop in one who is out of touch with reality and with a "shut-in" personality. Farrar has differentiated certain well-developed anlage types:—"(1) Backward type: In this group are included those lacking in ambition, the absent-minded and forgetful, the truants, and those lacking in application. Later in life the work impulse is absent or inadequate. (2) Precocious type: These are the bookish, serious, prudish, model children. (3) Neurotic type: These are the delicate children, subject to headaches or minor ailments. They have tantrums, are selfish, deceitful and 'difficult.' (4) Asocial type: These are seclusive, day-dreaming, castle-building individuals, who tend never to thoroughly emancipate themselves. (5) Juvenile type: This is the type that never 'grows up.'" In civil life many of these people lived a secluded life, and were able to meet the demands put upon them fairly satisfactorily, but in the army the strain was too great, and there was a want of harmony between the individual and his surroundings. In addition, certain other complex factors arose, such as: (1) Conflicts over auto-erotic habits; (2) the doubts, real or imaginary, in regard to the faithfulness of wife or fiancée. *Prognosis and treatment*: The writer found that the results were better than those obtained in civil life. McCurdy has pointed out that anxiety and conversion hysteroid states in war-time come about at a more superficial level, and react more readily to treatment than cases occurring in civil life. Similarly with the war psychoses; many of these patients would not have developed dementia præcox in civil life, and often a history of a dementia præcox make-up is not found in them. In the army, too, abnormal conduct is quickly noted, and the patient is soon sent for investigation. Army experience offers a concrete example for the early treatment of mental cases. A great many cases made a complete readjustment, a large number a partial one, and probably only a

minority remained chronic. In civil life a readjustment is occasionally made, but it is not so satisfactory or permanent. Frequently, on admission to the mental wards of the Lord Derby War Hospital, the patient was convalescent and had some insight. A discussion of the case, with an explanation of the origin of the patient's ideas, was then usually sufficient to straighten out the patient's tangle. The physician should be well trained to deal with mental disorders. In addition, the treatment consists of rest in bed, of occupation capable of stimulating interest, and of general measures for improving the health of the patient. Many excellent illustrative cases are given.

C. W. FORSYTH.

Geographical Distribution of Dementia Præcox in New York State: A Study Based on 9,024 Dementia Præcox Patients admitted to the Civil State Hospitals from October, 1911, to June 30th, 1918. (The State Hosp. Quart., May, 1919.) Pollock, H. M.

The average annual rate of admission of new dementia præcox cases in the New York State was 13.8, in urban districts of the State it was 15.8, in the rural districts 6.0. Of the 9,024 dementia præcox patients, 4,694 were males and 4,330 females. The author sums up his conclusions as follows: "(1) The rate of incidence of dementia præcox is much higher in cities than in rural districts. (2) The two sections of the State in which dementia præcox is most prevalent are the lower Hudson Valley and the lower Genesee Valley. These sections have several points of similarity. (3) The rate of incidence of dementia præcox is higher in large cities than in small ones, but the individual exceptions to the rule seem to indicate that the size of the city is not a dominant factor."

The possible explanations of the variation of the rate in the various counties and cities of the State are: (1) Differences in diagnosis in the several State hospitals. As, however, the matter of uniform diagnosis has been emphasised throughout the State hospital system, it is unlikely that this is an appreciable factor. (2) It is more probable that the rate of incidence is influenced by the race distribution of the general population. There is a high rate among Hebrews and Slavs and a comparatively low rate among the Celtic and mixed races. (3) The complicated life of the city may make it more difficult for mild cases to remain at large or at home. It is probable also that mild cases in the country are not so frequently admitted to State hospitals. (4) If dementia præcox be a hereditary malady, the presence of a considerable number of families in any locality bearing the taint of the disorder would have a decided influence upon the rate in the smaller cities and towns.

C. W. FORSYTH.

A Case of Pseudologia Phantastica. (Rev. of Neurol. and Psychiat., July-August, 1918.) Read, C. Stanford.

Healy defines pathological lying as a "falsification entirely disproportionate to any discernible end in view, engaged in by a person who at the time of observation cannot definitely be declared insane, feeble-minded, or epileptic. Such lying rarely if ever centres about a single event; although exhibited in very occasional cases for a short time, it

manifests itself most frequently by far over a period of years, or even a lifetime. It represents a trait rather than an episode." The case described is that of a Canadian soldier, æt. 21. His mother's sister died in an asylum. In early life he was afraid of the dark and of being by himself. He always feared and disliked his father, but was attached to his mother. From an early age he had a vivid imagination, and wanted to be an author. Twice when about age fourteen he ran away from home to become a bell-boy at hotels, where he used to lie a good deal to make himself appear a man of the world. About this time he published two stories in a magazine, and of this he was very proud. His father took him home both times after a few weeks' absence and placed him under a tutor, whom he told he was then in the British Secret Service. In August, 1915, he ran away from home and joined the army. He came to England in July, 1916, and went to France in July, 1917. When in England he told his sweetheart that he was in the Secret Service, and had therefore special privileges. In France he was under heavy fire, and in July, 1918, he was blown up by a shell and rendered unconscious for two hours. He then for some weeks complained of insomnia, headache, slight depression, and irritability. Towards morning he had hypnagogic hallucinations, hearing his comrades saying that he was a spy. He determined to give himself up as a spy, though he knew that this self-accusation was not true. At the same time he had uncontrollable impulses to steal. He enjoyed telling that he had been working for the enemy Intelligence Department since the age of ten, and gave details as to how he gave the Germans his information. He was taken to the A.P.M., and later to the Army Intelligence Headquarters, and repeated his story, gradually enlarging and improving upon it. After a short time in detention he confessed that he had lied, but not being believed in this he determined to keep his lying up. He said that he would have stuck to his story had they taken him out for execution, and he pictured himself bandaged, about to be shot, giving some dramatic speech at the last moment. The authorities now concluded that he was lying, and sent him to hospital. Later he was evacuated to England as an insane person. On admission to "D" Block, Netley, he told his story simply and readily, and showed much intelligence. At this stage he felt no desire to lie.

The usual mechanisms of *pseudologia phantastica* are here typified. The tendency to pathological lying started in his early formative years. Like all such liars, he had a purpose, *i. e.*, to enhance his own personality, to tell something interesting, and the ego motive was greatly to the fore. A pathological liar is unable to adapt himself to reality; fiction, imagination, and real life are not separated, and there is a desire to play a *rôle* according to the ego complex involved. If his peculiar mentality had been understood in earlier life and his natural interest drafted into the right direction, much, if not all, of his later pathological behaviour might have been obviated. The tendency to pathological lying arises from unconscious impulses which will again become coercive when circumstances give little or no chance of his desires being fulfilled. His kleptomaniac acts are interesting. Healy constantly found in his observations on juvenile delinquents that stealing had taken place as the result of mental conflicts.

C. W. FORSYTH.

War Neuroses, Environment and Events as the Causes. (*The Amer. Journ. of Ins.*, January, 1920.) Briggs, L. V.

The experiences of the American Neuro-Psychiatric Service for the New England States are reviewed. In 10 months 1,172 nervous and mental cases were rejected, classed thus:

Mental Deficiency	. . .	576	cases or about 50 per cent.
Nervous Disease or Injury	. . .	270	" " " 23 "
Psychoneuroses	. . .	120	" " " 10 "
Psychoses	. . .	108	" " " 9 "
Inebriety (Alcohol or Drug)	. . .	57	" " " 5 "
Constitutional Psychopathies.	. . .	41	" " " 3 "

Environment was the important factor in eliciting mental instability (1) in the Home country; (2) overseas at the Bases; and (3) subsequent to the cessation of hostilities in the army of occupation, where the monotony of life and absence of diversion engendered psychasthenia or actual manic-depressive insanity. Among intelligent volunteers of the better class this factor scarcely operated. Mobilization experiences and camp training proved many men unfitted even for duties to which they were accustomed in civil life: mental age tests showed a large proportion of these feeble-minded. Thorough psychiatric examination during recruitment was most advantageous in eliminating the environmentally irresponsive, so that among 27,000 men thus tested and accepted only one mental case (of epilepsy) developed prior to active service; and, in addition, when events began to come into play, *i.e.*, with the ordering of drafts forward to the trench line, six cases of psychosis alone manifested themselves. Further records are not available. In later drafts less drastically combed out numerous men were by environment rendered unsuitable for soldiers, and while overseas had to be rejected as unfit or put into labour battalions.

Events determining neurosis or psychosis occurred mainly at the front, principally before, during or after shell-fire. The chief causes were found in fatigue, in the advance to exposed positions, or in overpowering anticipatory ideas of action, of possible death, and of anxiety for dear ones at home. In the maelstrom of war regular army officers of long service exhibited mental breakdown where many men from civil life held up. It is pointed out that the officers had previously been accustomed to non-arduous garrison duty with small responsibility and much social amenity, whereas the civilians were inured to a struggle for existence with little relaxation. The continual proximity of death resulted seriously to the unstable or nervous individual. In the trenches were many nervous to the point of neurosis to whom the cure came in action; and indeed these were often the first "over the top." The horrible sights of maiming and mutilation caused men and officers alike to attempt to shut out from vision and memory these intolerable events. So great was their success that they often obliterated from their minds all the incidents of their lives for periods from a few days to months or even years. Yet in their dreams at nights these scenes were re-enacted, giving to the psychiatrist clues enabling cure. Many hysterics with loss of hearing, speech, sight, or use of limb were promptly cured at the Base Hospital; and neuroses at the front by some

following event or by suggestion from psychiatrists at First Aid Stations. The conflict in these cases is often very superficial.

JOHN GIFFORD.

Case of Systematised Delusions of Persecution, recovering after three years. [Sur un Cas de Délire de Persécution, disparu au bout de trois ans.] (L'Encéphale, February 10th, 1920.) Antheaume, A., and Trepsat, L.

This man, æt. 32, single, a keen mountaineer and "a good sport," of an unassuming disposition and with none of the paranoiac's pride and disdain, was, after serving at the Marne, exempted on his friends' appeal, to resume his old employment at a smelting works. There he at once became excited: voices accused him of skulking; he was to be shot; he could hear the gendarmes coming up the stairs. Soon he was of exalted birth, a substituted child, the victim of a plot. His persecutor ("the man who had taken his place") was continually watching him, following him, threatening him, calling him a traitor and a coward, and accusing him of unspeakable crimes. After fourteen months in the asylum, being now calmer though still very deluded, he was discharged to the care of his mother. He made determined efforts to rejoin the army, but was repeatedly rejected on account of his medical history, till, with the help of a recommendation from Dr. Roubinovitch, he got into the ranks of the artillery. He obtained some promotion, and was sent to the front. When on leave, he went to consult his old asylum physicians. All this time the delusions and hallucinations continued very active, though he "knew how to elude" his persecutor. At last, sudden great responsibilities, amid the carnage of the retreat from the Aisne, cured him, and he has been well ever since. From this case the authors conclude that the prognosis in systematised delusional insanity with voices is not so hopeless as is generally supposed. They tell us to note the therapeutic value of responsibility, and to beware of keeping such patients too long in asylums.

SYDNEY J. COLE.

4. Treatment of Insanity.

The German Institute of Psychiatric Research. (Journ. Nerv. and Ment. Dis., June, 1920.) Kraepelin, Emil.

In this paper, which appears to have been written while the war was still in progress, Kraepelin alludes to some of the many psychiatric problems urgently calling for investigation, points out that each new discovery infallibly raises a number of new questions which no one can foresee, and remarks on the inadequacy of the existing facilities for research—now supplemented by a new research institute. Even under the limitations imposed by the war, the funds necessary for establishing this were raised in less than two years. A temporary home was found for it in the Psychiatric Institute at Munich, which has numerous laboratories. Later it will come into close relations with a new admission hospital for the insane, which Munich proposes to erect. For a building of its own, the institute has a site already granted by that city. It

began its work on April 1st, 1917, starting with five departments, three being devoted to the various branches of anatomical work, one to serology, and one to demographic-genealogical research. A department of chemistry, and one of psychology, will probably be added. The heads of departments enjoy complete independence, and have the same rights as other Bavarian officials. As the research institute is affiliated with the university, they are all members of its teaching staff, but their university work is subsidiary. Scientific research and the gaining of collaborators are their exclusive field of activity. To induce young and ambitious men to work in the research institute, provision has been made for a number of laboratory places, and more are projected. It has been suggested to all such corporations in the various German States as have to provide for the care of the insane that they should pay an annual rental of 2,000 marks per laboratory table and appoint suitable candidates. In spite of the burdens of the war, twenty such corporations have already agreed. This ensures the healthy growth of the institute, and brings it into most desirable relations with asylums. The latter will derive helpful suggestion from the scientific work done in the institute. The founders, and the Kaiser-Wilhelmsgesellschaft (which grants an annual subsidy), will also have the right to appoint candidates. For the necessary library, which ought to be as complete as possible and include all auxiliary sciences, the gift of the very valuable collection of the late Geheimrat Lähr-Zohlendorf supplies an excellent nucleus. For a research institute on the large scale, more money is needed, and this the State can never be counted upon to provide, hampered as it is by tax considerations. Private endowment must be secured; and possibly this method of founding institutions is better for their healthy growth, as it gives them greater latitude.

SYDNEY J. COLE.

Note on Lunacy Administration in Ireland with Suggestions for Reform.
(*Dublin Fourn. of Med. Science*, June, 1920.) *Leeper, R. R.*

Existing Irish lunacy legislation dates from the early Victorian era. The late Inspectors of Asylums reported on its defects to the Government in 1895, but nothing resulted. Most regrettable is the loss to Ireland of the Mental Deficiency Bill. Ireland in 1906 possessed 25,415 mental defective persons outside of asylums, and of these 66 *per cent.* were in need of care and rational management, as against 44·45 *per cent.* in England, and 34·57 in Scotland. All efforts to have Ireland included in the Bill failed. The Irish division of the Medico-Psychological Association sent a resolution to the Chief Secretary for Ireland in November, 1919, suggesting that in the appointment of the Irish Public Health Council representation should be given on that Council to that branch of the profession specially concerned with the treatment of insanity in Ireland. The Public Health Council was set up without a representative of the asylum or lunacy service—either legal, medical or lay—being placed upon it. It is understood that this Council is to deal with the question of asylum administration! A deputation of the Irish division of the Association met the Council and placed their views before them in the form of a memorandum drawn up by the most experienced alienists in Ireland.

The writer some years ago pointed out the desirability of trying to limit the obvious causes working in Ireland which tend to produce insanity, crime, and degeneracy. Foremost amongst these is the continued and wilful neglect of the care and control of the feeble-minded. An effort ought, too, to be made to set up some form of specialised colony for the treatment of epileptics. Legislative changes must be initiated by those whose life interest has been the betterment of the insane, and whose experience and knowledge entitle them to deal with so difficult and specialised a subject. C. W. FORSYTH.

Luminal in Epilepsy. [*Un Traitement efficace de l'Épilepsie : la Phényl-éthylmalonylurée ou Luminal.*] (*L'Encéphale*, July 10th, 1920.) Maillard, G.

Those who discussed this paper at the Société de Psychiatrie of Paris agreed that luminal is very efficacious as a preventive of major fits, but appear to have spoken chiefly of its aptness to produce mental disturbance—alteration of character, irascibility, impulsiveness, excitement and violence. Rogues de Fursac said that at the Ville-Evrard asylum Ducosté had observed these effects, good and bad, even with minimal doses, never exceeding 15 cgm., and in some instances a mental disturbance really grave—even delirium. Maillard showed that abrupt discontinuance of the drug is apt to provoke numerous fits.

SYDNEY J. COLE.

5. Pathology.

The Histopathologic Findings in Dementia Præcox. (*The Amer. Journ. of Ins.*, January, 1920.) Rawlings, E.

The research occupied nine years. Precautions to prevent *post-mortem* changes and the inclusion of cases involving psychotic disease processes other than the one under review were as complete as possible. Any case conceivably open to doubt was eliminated. Only cases with a clear præcox history were employed. And of 52 cases minutely worked out only 12 were made the basis of this article. The 40 remaining cases gave sufficiently clear indication of the pathological changes which the author regards as typical of this psychosis, although in this larger series masked by changes pathognomonic of other disease conditions. The areas investigated were usually the frontals, centrals, paracentrals, parietals, temporals and cerebellar; the staining methods and technique employed are indicated; the histories, clinical abstracts, and causes of death are outlined; the pathological findings for each case are well detailed and diagrams are appended. The following groups of cases were excluded:

(1) All over 60 years of age, to avoid senile changes other than Alzheimer's; (2) long-standing mixed manic-depressives; (3) paranoid involutions, possibly due to chronic diseases; (4) imbecilities with frequent disturbance. Of cases under sixty, 10 were rejected for cortical arteriosclerosis (only 1, however, showing nerve-cell devastations). The series of 12 is advanced as probably presenting a disease entity. Ten showed macroscopical atrophies, chiefly frontal: 1 with heredity

may have been agenetic. A defective endowment could be ruled out almost positively in 8 cases, though 7 had hereditary history; but the conclusion that the lesions were acquired could only be absolutely adopted in 1 case. Of the remaining 4, 2 had a background defective + heredity = agenesis + aplasia, and 2 had insufficient history.

The pathologic findings were uniform and essentially chronic. The duration varied from 4 to 33 years, with an average of 13.6. There resulted atrophy of the nerve-cell body and its nucleus, disappearance of stainable substance, attenuation with partial fragmentation of neurofibrils, and atrophy with distortion of protoplasmic prolongations, the termination being either (1) extreme pyknotic atrophy, the cell and prolongations covered with incrustations; or (2) the fragmentation of the cell to a more or less shadowy outline. The neurofibrils were also fragmented, the changes being unlike those in general paralysis of the insane, senile dementia, or Alzheimer's disease. The more acutely altered nerve-cells showed fatty deposits which even filled the cells and extended to the prolongations. The glial nuclei, especially in the molecular and infrastellate layers, showed irregular stippling with fine fat granules. Lipoidal matter was largely manifest in the adventitial cells of blood-vessel walls or in their lumen. Regressive alterations occurred generally in glial structures—in the glial nuclei of both grey and white matter atrophy or varied stages of fibre-formation leading to foci of gliosis; and increase in the surface mat. Amœboid glial cells were of special type diverse from recognised acute terminal manifestations. Satellitosis was negligible. Where the process was most acute neurophages were frequent in all layers closely applied to nerve-cells or in lacunæ of their protoplasm.

In three cerebella nervous tissues were destroyed, especially at the convolution summits where Purkinje cells were extremely atrophic, pyknotic or patchily lost.

Regionally the frontal areas, but occasionally the central, suffered most severely, and the changes in the right hemisphere were surprisingly less established. Statigraphically the greatest involvement was in the first three nerve-cell layers, decreasing and less diffuse toward the third stratum. The stellate layer was singularly fragmented. The process is probably initiated as moderate swelling of both cell-body and nucleus, succeeded by gradual disintegration of the chromatin framework. It is concluded that these changes may be assumed pathognomonic of dementia præcox.

JOHN GIFFORD.

Studies in the Pathology of Dementia Præcox. (Proc. Roy. Soc. Med., 1920, vol. xiii., Sect. Psych., pp. 25-63.) Mott, Sir F. W.

Sir F. W. Mott made a histological examination of the generative organs in many cases of dementia præcox, and his investigations showed a varying degree of regressive atrophy of the seminiferous tubules in all the cases. Corresponding changes have also been found in the ovaries of female patients. The author, however, does not consider that this regressive atrophy of the reproductive organs is the cause of the mental changes by its disorganising influence on the chemical balance of the body, though he admits that auto-intoxication may act as

an important contributing factor in certain cases. In his opinion the atrophic phenomena in the sexual glands and the degenerative changes occurring in the brain cells are concomitant manifestations of a lack of durability germinal in origin.

It is essential to recognise two morbid conditions affecting the neurones which are related to functional disorders or organic disease—the one, characterised by changes in the arrangement and quantity of the basophil substance (chromatolysis), indicates *suspension* of function; while the other, showing biochemical changes, points to degeneration or even death of the cell (*suppression* of function).

Mott made personal observations of the brain in eight cases of dementia præcox and found widespread alterations in the neurones. Not only were there morphological and biochemical changes in the nucleus, but there were also morphological and biochemical changes in the cytoplasm of the cell and its processes. The cortical cells were most affected, but less marked changes were also noted in the basal ganglia, the stem of the brain, and the medulla oblongata. Importance is attached to the fact that the changes mentioned were observed in the stellate cells of the layers of granules, as these have not been noted by the majority of authors. These cells are the intercalary neurones and constitute the second type of Golgi, which form a synapse with the first type of Golgi. In some cases deficient development of many neurones was observed, notably in the small and medium-sized pyramids in the frontal lobe. The neuroglial cells showed proliferation. In none of the cases was there thickening of the membranes of the brain or changes in the vessels.

The author demonstrates how these morbid changes in the brain and reproductive organs may be correlated with the characteristic symptoms of dementia præcox. It is not uncommon for psychic abnormalities to precede the real development of dementia præcox (“dementia præcossissima”). Probably such cases would be found to present not only deficient neuronic development but also arrest of spermatogenesis: “and at puberty, when the stress of productive energy of the reproductive organs occurs, nuclear neuronic decay sets in.” When the mental symptoms first appear at puberty or early adolescence the progressive deterioration which ensues may be correlated with regressive atrophy of the testes. This failure of the reproductive organs points to a germinal defect.

Suspension of neuronic function, indicated by chromatolytic changes caused by auto- or hetero-intoxication, is capable of remission and even of recovery; but *suppression* of function, characterised by biochemical changes brought about by a germinal lack of durability, shows no remission, the psychic deterioration being continuously progressive (dementia simplex). Those cases of dementia præcox in which remissions or partial remissions occur, or sudden changes from apathy to impulsiveness, would probably be found to present both these conditions associated in the same subject.

As is well known, cases occur presenting all or many of the clinical symptoms of dementia præcox, but which, nevertheless, recover. It is assumed that in such cases the neurones would show chromatolytic changes, implying suspension of function. In regard to the morbid

changes in the intercalary neurones, Mott says: "The affection of the stellate intercalary cells which enter into the synapse . . . suggests that a hypofunction or suspension of function of these neurones would lead to a synaptic dissociation and thereby account for psychic dissociation and the coming and going of symptoms; or where there is a permanent morbid change, to a suppression of their function with permanent dissociation."

In one of the cases (a monorchid) investigated by the author the suprarenal gland on the side of the absent testicle was found to weigh one-half that of the opposite side, and the cortex adrenalis was much diminished in quantity. This deficiency of the cortical lipid substance was also observed in other cases of dementia præcox. These findings are significant in view of the fact that there is much evidence to show that the adrenal cortex influences the genital function, though it is not certain whether it acts alone or in conjunction with other endocrinic glands, *e.g.*, the thyroid and pituitary. Among the functions attributed to the suprarenal cortex are the manufacture of lipoids of the body and the building up of myelin of the nerve-fibres of the brain.

It is clear that the further investigation of the rôle played by the glands of internal secretion should not only prove to be of considerable scientific interest, but should, at the same time, be able to throw much light on the ætiology of dementia præcox.

NORMAN R. PHILLIPS.

Epidemic Encephalitis and Katatonic Symptoms. (The Amer. Journ. of Ins., January, 1920.) Bond, E. D.

The writer through illustrative cases points out the relationship of epidemic encephalitis to the katatonic psychoses, and propounds the plausibility of cerebral disturbance as a basis for katatonic episodes. There proved to be many features in common, and especially abnormalities of muscle function. He asks for a unified and definitive terminology, rendering possible the exact description of postures, tensions and other activities of muscle, as found, *e.g.*, in katatonia. No observer, however careful, can convey with the existent generalized vocabularies any exactitude of clinical visualization to the reader. Granting this as achieved, it is further essential that there should be methods of examination and diagnosis standardized in succinct fashion, so that the findings of various investigators can be relied on to express the same phenomena. Control and description of the surrounding circumstances is also necessary. He instances Langelan's method of recognising hypotonia as a case in point, while admitting that in the hands of different workers lack of thoroughness may result in this term being used for very varying degrees or even actually diverse conditions. He pleads for the institution in mental hospitals of conditions which will permit of thorough repeated examinations, even, be it noted, in long-standing chronic cases. And he foresees therefrom a rich harvest of reward. Mild transient but definite symptoms are usually missed in excited, seclusive, or indifferent patients. Obscure explanations are only justified, and should only be sought, when the above methods fail to elicit causation. He supports his contention by a graduated series

of cases where improvement or cure resulted from attention to simple pathological conditions, as oral sepsis, thyroid deficiency, and strabismus, also the use of lumbar puncture.

In three cases brain disturbance was located by cranial nerve involvement, in one by this and autopsy.

In general he stresses the essential sameness of the problems in all departments of medicine, as these cases of encephalitis would normally not have reached the purview of the psychiatrist, and their lesson would have passed unheeded.

J. GIFFORD.

6. Sociology.

The Movement for a Mental Hygiene of Industry. (*Mental Hygiene*, January, 1920.) Southard, E. E.

The writer refers to the work of the psychologists and neuropsychiatrists in eliminating the feeble-minded from the American army, and to the establishment of morale officers. Such methods he would see applied to industry. He discerns a psychology of industry, using mental tests and scales; a psychiatry of industry, specialising in grievances; and a psychiatric social work in industry, tracking down the discharge, grievance and psychopathy problems outside the factory or mine. It will be advisable for large-scale plants to have part-time consultants, chosen from amongst the more able mature neuropsychiatrists. Care must be exercised in the selection, for some of the professionally best of these men remain too analytic for the industrial situation and unable to see the values of rough-and-ready practical combinations which are the lot of employment managers and the minor executives. These consultants, if they once see the problem, can choose full-time younger medical aids, if such prove practically necessary. Employers are generally quite willing to employ psychopathic persons whose mental conditions and industrial efficiency are frankly described, and to retain them as long as they are able to do the work. Understood by their employers and taught to understand themselves, psychopathic individuals who would otherwise be thrown out of industry may keep their places as efficient employees. Mental hygiene as applied to industry is not a matter of efficiency alone or of welfare alone, but combines both aims.

SYDNEY J. COLE.

Should the Plea of Insanity as a Defence to an Indictment for Crime be Abolished? (*The Amer. Journ. of Ins.*, January, 1920.) Macdonald, C. F.

There are cited and discussed proposals made by a Committee of the New York Bar Association in a series of three reports on "The Commitment and Discharge of the Criminal Insane." They would relegate to the obsolete the assumption that an insane man cannot commit a crime, leaving to the petit jury one issue—"Did the accused do the forbidden deed?" They advocate the abolishment of the defence of insanity, which defence they deem sociologically wrong. They refrain from recommending legislation to effect so radical a change in the criminal law on the ground of the unreadiness of public

opinion for such a step, but declare that the question should be discussed, and request an expression of opinion from alienists and interested organisations. They formulate, however, a suitable enacting clause for addition to the present Penal Code—"Insanity or other mental deficiency shall no longer be a defence against a charge of crime; nor shall it prevent a trial of the accused unless his mental condition is such as to satisfy the Court upon its own inquiry that he is unable, by reason thereof, to make proper preparations for his defence." The determination of the mental state of the accused should not belong to the jury which settles whether or not a crime has been committed, but to the successive tribunals which after the verdict of guilty define the punishment, its nature, degree, possible remission or abandonment.

The author notes that the suggestion is no new one, but has been previously made by alienists and medico-legal jurists. It is generally conceded that the only justification for maintaining a system of criminal punishment is derived from the absolute necessities of society for its preservation and benefit solely on the principle of the greatest good to the greatest number (although in particular instances cruel injuries result). The insane are not restrained from the violation of laws by force of example and fear of punishment. No human law can be more imperative to the insane than that higher law within him which impels him to some act of violence.

Objection is made on the ground that there is no crime without criminal intent, which is intimately connected with—yet distinct from—the mental state of accused. In many cases it is essential that the jury ascertain the intent of defendant. Where they must pass upon this question, it is a moot point whether the matter of sanity or insanity should be left to them. Thaw shot White with intent to kill, knowing that it was White; he did precisely what he intended to do. The defence was that Thaw's intention was an insane intention and therefore he was not guilty of effecting White's death.

The writer submits two alternative propositions: (1) The feasibility of replacing the present verdict of "Not guilty by reason of insanity" by the English form "Guilty but insane," or (2) where insanity is pleaded as a defence, the part of the jury should be restricted to deciding as a matter of fact the guilt or innocence of the defendant without reference to his mental condition, which should be later adjudged by a special commission of alienists appointed by the Court; whose finding, being impartial, would satisfy the public and ensure no miscarriage of justice. He adduces as his reasons (1) a jury of laymen are incompetent to decide abstruse questions of medical science; (2) the prevailing inducement of corrupting *largess* for favourable expert opinion would be obviated; (3) sensational appeals to the emotions of the jury would disappear; (4) the public scandal now incident to such trials would be mitigated. The Thaw trial, if decided on such lines, would only have occupied a few hours, the mental examination a few days (instead of two trials with all their disgusting details lasting many weeks at enormous expense to both the State and Thaw's family), and the result would have been the same, *viz.*, his committal to a criminal asylum.

J. GIFFORD.

Mental Hospital Reports for 1919.

Belfast District.—As compared with the previous year the numbers in residence show a decrease of 5—the actual total being 985. The admissions increased by 15, discharges and deaths diminished by 6 and 61 respectively; but the death-rate still stands at an abnormally high figure, being 14·8 *per cent.* of the daily average number resident—not of the total number resident during the year, which the wording of the report would appear to imply.

There is, however, the satisfaction of noting a handsome decrease in this respect from the experience of the preceding year, which had a percentage of over 19. General paralysis accounted for 16·7 *per cent.* of the total deaths.

One hundred and fifteen patients were discharged with a recovery rate of 30·1 *per cent.* as estimated upon the number of admissions, or of 5·9 *per cent.* if the total number resident during the year be taken as the criterion.

The Villa Colony is overcrowded to the extent of 215 patients, or 28·5 *per cent.* above its normal capacity. This fact calls for either an increase in the number of villa residences or the reoccupation of the old asylum buildings in Grosvenor Road. The latter would appear to be a retrograde step, and it is hoped that the Committee may see their way to extend the Villa system in consonance with the progressive spirit of the city they serve.

In order to meet the demands of the subordinate staff, the scheme of wages and working hours which has been drawn up by the Joint Conciliation Committee for the Asylums of England and Wales has been adopted.

Amongst occurrences of note during the year was the evacuation of the old asylum buildings in Grosvenor Road by the Army Authorities. There, under the name of the Belfast War Hospital, mentally afflicted soldiers had found sanctuary and treatment during a considerable proportion of the war. Another matter of interest was the setting up of part of Purdysburn House for the accommodation of paying patients, which apparently leaves the resident medical superintendent without a residence befitting his position. This is not as it should be. Both the senior and second assistant medical officers have come successfully through active service, adorned with the honours of war. Each has won the right to wear the M.C., and in the case of the second assistant—Lieut.-Col. Wm. Tyrell—the D.S.O. has also been conferred. The latter, however, has resigned his asylum appointment to take a permanent commission in the corps in which he has won such distinction.

Down District.—Little change has taken place in the number of patients in residence since the corresponding period of the previous year, the actual number at the end of 1919 being 712.

One hundred and eighteen patients have been admitted, in the causation of whose illness heredity was held to be responsible in 37 cases, senility in 15, mental stress in 10 and syphilis in 5.

In many respects Downpatrick is an exception to the rule obtaining

in most Irish district asylums. These respects need not be dwelt on here except concerning the rather doubtful honour it possesses in its liability to contain more than its share of general paralytics, a fact that may be accounted for by its proximity to Belfast. Five examples of this form of disease were admitted during the year. In many another Irish asylum there would not be even one case spread over a series of years. Of the other admissions, 54 patients were classified under the various forms of melancholia, and 31 under the divisions of mania. There was only one primary dement. Sixty-three patients were discharged, of whom 50 had recovered, which gives a recovery rate of 42·4 *per cent.* as calculated upon the admissions.

Death accounted for 57, a decrease of 29 compared with the previous year. The percentage of deaths on the daily average number resident now stands at 8, which compares with 11·6 for 1918. Twenty-nine of these deaths were caused by diseases of the circulatory system, which works out at over 50 *per cent.* of the total—a somewhat remarkable result. Eighteen deaths were caused by tuberculosis and 5 by epilepsy.

The gross average cost of maintenance is at £58, showing an increase of almost £8 in the year.

Farming has produced the satisfactory total of almost £2,758, the area being 136 acres of the asylum land plus 28 additional acres rented for the purpose.

The medical superintendent lays stress upon the necessity of establishing psychopathic wards, associated with out-clinics, in the general hospitals. He also draws attention to the want of special knowledge in mental disease on the part of many young medical officers who enter the service, and he expresses the opinion that the possession of a diploma should be an essential either before or after appointment.

In this connection, however, it is well to remember that, with the exception of one university, neither post-graduate lectures nor registerable diplomata for the subject are available within the country. The excepted university's diploma is, unfortunately, confined to her own graduates.

It would be asking too much from the recently qualified were they expected to agitate for the establishment of facilities in the dilatory universities and colleges. Some impetus, however, may be needed before the deficiency will be made good and so remove a very serious handicap from the young medical graduates of the country.

Kilkenny District.—The admissions for the year were 84 in number—an increase of 21 compared with the preceding year. Heredity was considered to have been the principal causative factor in 37 *per cent.* of the admitted. This percentage is well above the average return in Irish asylums as a whole. In 32 instances—equal to 38 *per cent.* of the total—no causative factor could be ascertained owing to a defective history. Twelve of the patients had seen service in the army during the war.

Of the 27 who were discharged, 19 had recovered, which gives a rate of 22·6 *per cent.*, as calculated upon the admissions. The percentage

of deaths on the daily average number resident was 8·2—a valuable diminution from the 14 *per cent.* of the previous year. The reduction was attributed to two circumstances—an improvement in the condition of the bread owing to the abandonment of war flour, and the absence of a serious influenzal epidemic in the period under review.

The asylum population was increased by 18 patients, the actual number of those in residence at the end of the year having been 490. The increase is accounted for by a decreased death-rate plus an increased number of admissions.

The average gross cost, without any deductions, came to £63 11s. 6d., which figures show the enormous increase of £16 6s. 4d. over those for 1918. This increase, no doubt, was largely due to the introduction of the 56-hour working week, which entailed the appointment of 13 additional attendants, and also to the greater remunerations given in the form of wages. In this connection, however, apparently there has not been any *quid pro quo* concerning the possession of nursing qualifications, for according to the memorandum of inspection, no instruction was being given to enable the staff to qualify for the certificate of the Medico-Psychological Association.

The farm has produced a net profit of £1,355, the area under cultivation and grass having been 30 and 14 acres respectively.

Limerick District.—There were 600 patients on the register of this asylum at the end of last year, which, in comparison with the same period of the preceding one, shows a decrease of 27. The decrease, however, is not so satisfactory as it would appear to be, inasmuch as it was mainly due to the removal of some patients during a strike. Thirty-two of these did not return to the institution.

One hundred and sixteen were admitted, the chief causative factors of whose illness were heredity in 34 cases, mental stress in 20, and mental instability in 9.

No factor was ascertainable as a cause, owing to defective history, in the large number of 39 patients, or 33 *per cent.* of the total admissions. In not even a single case was syphilis the cause, which is somewhat remarkable for a port with claims to being the country's fourth in importance. Alcohol accounted only for the illness of 3.

Of the total number discharged, 12 had recovered and 60 were relieved. The recovery rate stands low at 10·3 *per cent.* of the admissions. This result may have been influenced by the circumstances mentioned above—the removal of patients before recovery had been established. In the previous report the rate of recovery was 22 *per cent.*

Sixty-eight patients died, which gave a death-rate of 11·6 *per cent.* of the daily average number resident. Eight of these were accounted for by influenza, and in 20 pulmonary disease was the cause.

Seventy-two acres of land produced a profit of £1,007. Forty-eight acres had been in grass, and 24 under cultivation.

The gross average cost came to the sum of £61 4s. 4d. If the repayment of loans be deducted, the result was £58 7s. 11d.

Deducting various receipts from paying patients, farm profits, etc., the average cost is reduced to £55 15s. 6d., which is an increase of almost six pounds over the figures for 1918–1919. The cause of this

increase was shared between the cost of provisions, larger wages, and the necessity for employing 14 additional attendants owing to the introduction of the 56-hour week.

The auditor draws attention to the fact that the tradesmen are paid the standard rate of wages current in the district. In the case of those who draw rations, the value of these is taken at much below their real worth—with the result that these men are being paid, in reality, at a higher rate than the standard wage would entitle them. This he regards as unfair both to those of their colleagues who receive a cash allowance in lieu of rations and to the ratepayers.

As already mentioned, such a regrettable affair as a strike took place in the ranks of the nursing staff. The matters in dispute were amicably settled when the strike had been on for a week.

The exact age of an institution has a certain interest. For this reason one regrets that the actual number of the report under review has been omitted. Especially is it so in this case, concerning as it does indirectly the historic "City of the violated Treaty."

Wexford District.—The patients under treatment on the 31st December, 1919, were 477 in number—266 being women, and the remainder, 211, being men. These figures show a reduction of 6 as compared with those for the previous year.

The admissions rose by 22 in their total of 81. Discharged patients counted 43, of whom 28 had recovered, which gives a rate of 34·6 *per cent.* as calculated upon the admissions.

Forty-three died, which, on the daily average number resident, is a rate of 9 *per cent.* Of the total deaths 7, or 16 *per cent.*, were caused by pulmonary tuberculosis and 2 by accidents. One of the latter took place owing to the inhalation of vomited matter during an epileptic fit, and the other followed a fracture of the ribs. Among causative factors, 35 cases were assigned to insane heredity, which works out at a rate of 43 *per cent.*, as calculated upon the admissions. Heredity, as a whole, was responsible either directly or indirectly for the illness of 50 patients, which equals 61 *per cent.* of the admissions. The gross average cost without any deductions came to £57 6s. 8d., and the net cost to £50 1s. 8d. These amounts are considerably more than the £48 4s. 2d. and £41 10s. 4d. of the year 1918. Farming has proved a valuable asset with its profit of £2,104, which compares most favourably with the £1,002 profit of the previous year.

The sad death of Dr. Thomas Drapes took place during the year. First as visiting physician and later as resident medical superintendent he had served the Institution for 47 years, and had only been superannuated a few months when death called him.

Part IV.—Notes and News.

MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

SEVENTY-NINTH ANNUAL MEETING, HELD AT BUXTON.

(Continued from Vol. LXVI, p. 497).

MORNING SESSION.—WEDNESDAY, JULY 28TH.

Held at the Town Hall, Buxton, Dr. W. F. Menzies, President, in the chair.

A DISCUSSION OF SOME DETERMINANTS OF MORBID EMOTIONALISM.

An address by Dr. TOM A. WILLIAMS (of Washington, D.C., U.S.A.).

MR. PRESIDENT, LADIES AND GENTLEMEN,—I much appreciate your kindness in allowing me to bring my contribution before you this morning, as to-morrow would be inconvenient. But I must apologise for the fact that I have not been able to prepare an actual paper to read to you, so I must ask you to allow me to speak from notes, in a more or less haphazard way, because my thoughts have been so surcharged since I have been at these meetings by other men to whom I have been listening, especially by hearing the remarkable Presidential Address of yesterday and my talks with colleagues last night.

The subject I have to speak upon is, "Some Determinants of Morbid Emotionalism," or rather "Emotivity." I should first say what I mean by "emotivity."

Emotivity is a state of mind which hitherto, until this present century, was dealt with in a purely introspective and observational manner. Indeed, it was rather neglected by the more modern psychologists. I do not wish to psychologise about emotion and emotivity, but I would say it is hard to understand how there can be reaction or reactivity without a state of feeling, which is emotivity. Even in the case of the unicellular organisms, which have no differentiated nervous systems, we cannot conceive that an amoeba, for instance, which is repelled by a particular stimulus, does not have, at that moment, a state of feeling. And as we pass up the animal scale we are able to observe the difference between the manifestation of what we call a state of feeling or emotion, and the more purely purposive manifestations which we associate with the cerebro-spinal nervous system. So that we must remember that an emotion is not merely a function of higher psychic perception, or critical process; it is a function of the whole organism, and in it the whole organism participates.

What shall we regard as morbid in emotivity? We are all subject to emotivity; indeed, the individual who is not emotive is not normal, he is morbid. For instance, in regard to a speaker—and I am now going to have recourse to the much-derided process of the ultra-psychologists, namely, introspection—I propose to introspect my own feeling in appearing before this highly distinguished audience. Instead of having the feeling of deep emotion which I should have, I find myself in a state, at this moment, of comparative indifference. I think that is probably a morbid phenomenon, because one should face an audience in a state of high emotivity. That is, perhaps, due to a long process of attrition, of wearing down, which I have undergone, so that I am sorry I cannot reach the state of necessary emotionalism which our colleague Crile called the "kinetic drive." Prof. Robertson, last night, exhausted my "kinetic drive," at least what of it remained after listening to the address of the President yesterday, for he aroused in me not only emotions of appreciation for the exceedingly erudite inductions he performed, but also one or two of the combative or antagonistic reactions of Crile. These, not having resolved, remain, according to some colleagues whose doctrines I do not share, in a state of conflict in what they call the unconscious, and account for my comparative indifference in the present situation.

Having disposed, then, of the morbidity and the lack of emotion, let us try to find out what we ought to consider morbid.

We shall not consider as morbid an individual who has been suddenly bereaved of someone he loves very dearly and falls into a state of depression. But we should call it morbid if that state were to continue for a period which we consider unduly long. But I cannot see that we are able to draw a hard and fast line to determine when an extraordinary state is one of morbidity and when it is not, whether it be six months, or twelve months, or eighteen months, or for life. Who shall say when a widow should doff her weeds? I speak only in a symbolical sense, taking the widow's weeds as denoting a state of highly disturbed emotivity. Shall we call morbid an individual faced by imminent danger which he does not know how to avoid, who falls into a state of terror? We do not do so. Why, then, do we say of certain individuals who do fall into these states that they should be regarded as morbid, while of others we say they should not? Is it not a matter of convenience of description and teleological judgment on our part? In the early days of the war—at least in America—it was the fashion to exalt the horrors of the battle-field and to declare that no human being could face the awfulness of the emotions aroused thereby—that is, that the emotions could not be dominated by the will or by reflection or by discipline. That was found, before very long, not to be the case. It was found that even the most terrifying situations, which were at first viewed with such alarm as not being tolerable, were conquered by the education of the men in the feeling that such situations ought to be faced. And when that is the case, the average individual can face the situation, no matter how terrible.

That leads me to speak of one of the factors in the determination of emotivity we consider morbid. If an individual—and it is as true of situations in life—can learn to face such situations, and with impunity, or with equanimity, why is it that other individuals do not face the situation with similar equanimity?

There are three kinds of reasons, perhaps, and I propose to say a few words upon two, devoting the rest of my time to the third. One of them was applied in the President's address of yesterday—the state of inadequacy of neural activity, whether that is due to an active toxic influence, preventing due elaboration of the processes of which we shall speak later, or whether it is due to actual physical deficiency of the neurons induced by what we call organic disease.

We all know of the unreasonable irascibility, the euphoria and the depression at different times of the general paralytic whose cortex is in a process of disintegration. We know of the unreasonable terror and the unreasonable responsiveness to mild stimuli of the patient intoxicated by such a poison as that of the bacillus in the course of typhoid fever. We know the same kind of patient who is alcoholic. We know of the unreasonable depression of mind and spirits of the individual we call melancholic. And while it is premature to attempt to say that such conditions are due to any kind of physical deficiency, or to any kind of physical presence which we do not know, as the President endeavoured to show us yesterday—and I may say I fully agree with his train of reasoning and with his conclusion—yet I think we can find a type in the normal individual who has, perhaps, "the blues," which has been induced by a nocturnal debauch, the blues of "the morning afterwards," which we cannot fail to recognise as a physical state of a toxic nature. Many such persons cannot form true judgments, and, hence, the whole world seems blue; they are in a state of morbid disturbance, and their affectivity is in a painful state on account of their general intoxication, not necessarily impinging upon cerebral elements, but perhaps impinging upon end-organs in the viscera, and producing a painful state, which we do not call pain, but which we designate distress. This is a state which, through the peripheral nerves, affects the central nervous apparatus, so that the feeling provoked is one of distress, painfulness, and morbid affectivity. And we know how rapidly that state disappears in the course of nature, or by the intervention of the calomel-giving doctor.

The second type of morbid emotivity which I shall speak of is that which seems to be inherent in certain individuals, that is to say, constitutional emotivity. I question whether many of these are not really in the third category of which we shall speak, the hereditary element in them being not so important as so many of us are apt to suppose.

The third type is what I like to call the emotivity which is induced—that which is bred by induction. It is by far the commonest in my own mind and experience, but it is perhaps the least common in the experience of most of my audience, who perhaps deal with individuals of the first class. The patient who is brought to me because of emotivity, because of what he calls “nervousness,” can often be found to have fallen into this emotional state because of some stimulus, not of a chemical, but of a physical or dynamic character, of a physiological kind. That is to say, he has met with a circumstance, or a series of circumstances, which have aroused in him an emotion which he is unable to transcend. The person has previously been normal; often he is in other respects normal except in reference to this particular kind of incident which aroused the emotion. Such patients as we call “phobiacs” are the prototype of that situation. Perhaps I cannot do better than read the notes of one such case, and, perhaps, allude to one more, the particulars of which I have brought with me, so that we may have the basis of a discussion on the mechanism of such cases.

The first is the case of a boy, æt. 8, who had developed hallucinations which had occurred only when he was alone, and whenever he was alone. The hallucinations were accompanied by a loud cry and a twisting backwards of the neck and contortion of the body, so that a distinguished professor regarded him as epileptic. His father and maternal uncle were declared to have had similar attacks in childhood. The mother was over-anxious about the boy, and was “hysterical” and uneasy when he was out of her sight. Examination showed no physical signs of disease of the nervous system or of any other system. In anamnesis I found him to be a very sensible little fellow. My questioning soon showed that the hallucinations were not true ones, and that he never actually saw, felt or heard what he feared. Since he clearly recognised that he had actually never seen anything to be afraid of, it was a simple task to convince him that the wild animals he feared were only imagined, that, in fact, there was nothing to fear, and that he was quite safe, even when alone. It was impressed upon him that he must learn to be a manly boy and to depend upon himself. In order that he might learn not to be so timid, firstly he was told to go out alone every day, at first half a block, then a whole block, and finally round the corner, all the time remembering the need of manly behaviour. Secondly, he was told that he must go to sleep alone, so as not to be such a trouble to his parents. Thirdly, he was shown exercises to suppress the wriggling tendencies of his body. Having convinced the child of the unreasonableness of his fears, the parents, especially the mother, were dealt with rationally. It was explained to them that his trouble was a phobia against fear—an affective state induced by the idea that something dreadful might happen to a little boy unprotected by adults—an idea induced by the foolish anxiety of his mother and of which he was very well aware, whenever he was out of her sight. His morbid reaction had become a habit, which, with practice in self-reliance as outlined, could be overcome. As a result no further attacks have occurred for ten years.

That is a very simple example of induced emotivity, brought about by nervous apprehensiveness on the part of the mother, who was alarmed whenever the boy went out of her sight, and he showed the alarm very strongly, imagining all possible dangers. As he found no real dangers, he seized upon the only danger which looked like being real—that connected with farm animals, that they might jump on his back, and from the likelihood it was easy to imagine that they did so. When the thought seized him he would utter a loud cry and have a so-called automatic epileptic seizure.

The second case is more complex, and is that of a woman, æt. 33, whose sister had been sent to me on account of an intense migraine, and consulted me because of her inability, unless accompanied, to cross a wide street or to remain in a church or theatre, without an intense emotional disturbance, showing itself as palpitation, polypnœa, facial pallor, chilliness, moisture and cyanosis of the extremities, rigidity and pain in the neck and back, nausea, the sensation of great weakness and dizziness, which had lasted for eight years.

Examination showed no physical disease, the only signs present being myopia, rather prominent eyes, with slight fine tremor, excessive sweating and an enlarged thyroid, instability of the pulse-rate and of the blood-pressure. The latter at the first examination was 160 systolic, 100 diastolic; while the next day it had reached only 140 and quickly fell to 127 systolic and 85 diastolic, which I regarded as her

normal pressure. The pulse-rate, which had at first been 112 per minute, later was found to be 97, and was reported to me to be habitually less than 80.

The patient declared that while outside she was never able to relax, and had lately been becoming apprehensive even in the house, and had also felt very weak in the evenings, when her heart would often flutter apprehensively. It is not because she dreads an accident that she cannot cross the street alone, but because she fears losing consciousness on account of the heavy sensation of oppression which she experiences.

She was asked to recall the first occasion upon which she had experienced these sensations. After some effort she was able to recall that in church eight years before, on a hot summer day, she had begun to feel an overwhelming sense of illness during the sermon. The compulsion to leave the church was intense, but she was ashamed to do so as she sat near the front, well back in the pew, and did not wish to excite attention by creating a disturbance. She had not been ill at the time, indeed was an exceptionally strong girl, had had no worries, and the subject of the sermon caused no painful impression upon her. No attack recurred for some weeks. At the end of that time another attack did occur, and gradually she began to experience these incommoding symptoms either at church or in the theatre, and she was only able to avoid them by sitting near the door so that she could get out immediately she began to feel oppressed. About four years later she began to fear crossing a wide space, and she felt the need of someone to support her.

She had always had a fear of high places, but had thought nothing of it, as everyone else in the family felt the same way. She had never feared the dark, and she had had no social timidities, and had enjoyed her school and college life. She had always been anxious about the health of her mother, who was an invalid, but did not reproach herself for this as she had always attended to her. As a girl, however, she had been timid about appearing conspicuous, as in recitations in class.

A series of association tests were made, but revealed no morbid affects except when direct leading words were used, such as "pavement."

Further interrogation brought out the fact that it had been a very hot day when the first attack had occurred, in a small ill-ventilated country church, and that she had really experienced a physical oppression which was antecedent to the moral distress at the possibilities which she imagined.

It was concluded, therefore, that the hyperthyroidism evidenced by the size of the gland, the hyperidrosis, the prominence of the eyeballs, slight tremor, tachycardia and mobility of the pulse and blood-pressure was not the most important feature of the case, and might, indeed, be a condition secondary to the chronic emotional strain to which she was subjected, and that it might disappear if this were alleviated. Further, it was believed that hyperthyroidism could not be responsible for the emotions of the patient, for the psychic reaction was so specifically contingent upon definite circumstances, whereas the hyperemotivity of hyperthyroidism is occasioned by numerous circumstances, and does not tend to fix itself upon only a particular event.

It was therefore concluded that both the agoraphobia and the claustrophobia which this patient experienced were hysterical notions arising from the powerful suggestion of the recollection of a particular experience which was efficacious now only by intermediary of the timorous imagination of the patient. Accordingly, re-education was forthwith begun. The patient was at first unwilling to undertake it after my explanation, giving the excuse that she had never been willing to introspect, but she accepted the necessity of doing so when it was explained that a person was under an obligation to know himself, and that it is as futile to oppose this need as it would be to object to understanding technique if one were learning to play the piano. It was explained to her that her dread of what might happen in a close or open place was merely due to her own ignorance of the mechanism of the consequences of a wrong way of looking at things and the emotions brought about thereby, and that only when she obtained a true insight into her own psychological machinery would she be able to control it. The power of induced ideas and the feelings produced thereby were explained to her, and illustrated by the story of a play called "The Harvest Moon," in which a hard-headed lawyer was made sick by the means of a few words skillfully implanted.

After a while she accepted my explanation, and added: "It must have been fear, because on leaving the church one of the maids said, 'What frightened you?'"

She stated she was relieved after the relating of her feelings to me, because her sister had maintained that she had been wrong in showing too much sympathy for the patient's affliction. She added, too, that she was naturally "such a self-contained person."

In the course of a few days she was asked to write her account of the way in which she viewed her own psychology, and this I append :

"After several years of intense suffering from supposedly physical causes, it is, to say the least, surprising to be told that I am the victim of fear, and that, the fear recognised and removed, the physical symptoms will disappear. Of course, I know abstractly that fear is psychological, and that it does produce physical reactions just as other emotions do, but I find it hard to convince myself that the fear of fainting on the street or in an audience is in my case the source of all the unpleasant and peculiar sensations I have in such a marked degree. It still seems to me that there must be something other than this vague intangible 'unknown quantity' that makes me tremble at the mere thought of walking a block or two. And yet that line of argument brings me back to the psychological phase, for I have spontaneously written that I tremble at the *thought*. I have almost resented the idea of anything psychic, for it has seemed to me like an admission of weakness or lack of will-power, but I believe I am gradually coming to see that mind has something to do with matter, even in my own case, and that distant as it seems now, the physical symptom so uppermost and persistent may yield when I fully grasp the fact that there is nothing to fear.

"A few days ago I heard what seems to me to be a very striking illustration of association of ideas. A man who had been in the trenches was riding on a trolley-car here in Washington, when the current was short-circuited and the lights in the car suddenly went out, with the noise and buzzing sound that accompanies it. Immediately the soldier fell flat on the floor of the car, but before anyone could reach him he had risen and seemed perfectly well. He then explained that ever since hearing the explosion of bombs and bursting of shrapnel in the trenches any unusual sound or sudden noise produced the same shock, and wherever he happened to be he instinctively threw himself flat on his face for protection. This is, of course, an extreme case, but it is true that to a greater or less degree impressions are being constantly induced upon the human mind, and no one can escape the influence of them. One of the most familiar instances is that of actual illness produced in a perfectly well person by the power of suggestion which is so clearly brought out in the case of the lawyer in the 'Harvest Moon.' I have seen a happy, smiling baby draw down the corners of his mouth and finally cry real tears because someone had used a sympathetic pitying tone of voice in speaking to him.

"The casual greeting, 'How are you?' sometimes sets up, in a sensitive person, a train of thought that brings with it a whole list of physical ills not thought of before. Much has been said lately about the *moral* effect of the presence of American troops in the European trenches aside from the real reinforcement of man-power. Bishop Brent insists that the mere appearance of the American flag on the battlefields of France, no matter how small a force of men accompanied it, would be sufficient to hearten the whole French army and send it on to greater victory. Instances of *the power of an idea* might be multiplied, but it is evident that the human mind is easily swayed by impressions. It seems to me important, then, to see just what sort of big ideas are dominating our lives and giving colour to our work.

"About eight years ago I had an experience which marks the beginning of a definite period of my life during which I have suffered in the most peculiar and distressing way. As I try to recall it now, I have a very clear mental picture of the church where I was at service, and also a very vivid recollection of the sudden overwhelming sense of illness and oppression and a great desire to get out into some less restricted place. However, with a great effort I did stay until the end of the service. I thought little more of it, and attributed my discomfort to some slight physical disorder. But ever since that morning I can truthfully say that I have never been in any public gathering when I felt at ease and thoroughly relaxed. Always I am restless and uncomfortable and fidget about, waiting anxiously for the moment when I can be free from the strain. Even though intensely interested in sermon, lecture or play, and regretting to miss a word of it, I am often so really ill that I have to leave quickly for fear of fainting or making

a scene of some sort. I remember that several years ago a certain magazine published views of the interiors of the great opera-houses of the world. Absurd as it may seem, those pictures were frightful to me. I could not look at them without having the same sensations of space and height that I knew so positively I should feel were I actually sitting there in the flesh. This is to me pretty convincing proof that the idea of fear is the real cause of all the symptoms which have become more and more exaggerated until at times I am really ill.

"The same dread or fear of space it must be that makes me feel uncomfortable and unnatural when on the street, for I seldom walk half a block without swaying and dizziness and the certain conviction that at the next step I *must* fall.

"This fear, in my case, was evidently set up that morning in the church, and ever since I have supposed I needed medical treatment for some serious trouble, but now, with the assurance that there is absolutely nothing wrong in my physical make-up, my problem seems to be to rid my mind of the fear that has unconsciously, but, as I see it now, completely controlled my thought, and made the days when necessity urged me out of doors or my desire led me to some public function, occasions to be dreaded beforehand and looked back upon with horror.

"It is difficult for me to understand that these signs of illness are not illness at all, but caused by an induced impression; but I have high hopes that this view of the case is the final and correct one."

In the meantime she had complained of pain in the sacrum, and wished to make sure that there was nothing physical to cause it. She insisted that I examine her. I found no tenderness even on rotation of the hip, and only a slight scoliosis. There was no dilatation of the colon, and the appendix vermiformis had been removed. The surmise that the pain was due to the postural dragging induced by the restricted manner in which she walked on account of her dread was confirmed by the fact that it disappeared when she adopted a freer manner of locomotion.

The next step in the treatment was to accompany her to a large square in the neighbourhood, across which I made her go alone. Although her hands became cold and her face pale, the pulse frequency increased and her throat became dry, she declared that she performed the feat better than she had done. The following day she had to do so on several occasions alone.

When she came to see me again she declared: "I can't get over it. I feel so different, but I dread the return of the trouble. The day after you led me across the square was the best I have had for years. I went to church and enjoyed the service and experienced no palpitation. For a moment a sudden fear appeared, but I stopped and reasoned concerning it, and concluded that nothing could happen." I concluded with the final adjuration that all now depended upon herself, and she realised that she was well.

Thus, violent, persistent, long-continued agoraphobia and claustrophobia were traced to a single incident upon which they were dependent. They were removed in less than a week by efforts directed towards giving the patient an understanding of their mechanism—indeed, compelling her to grasp it, and then compelling her to take an exercise which afforded a practical demonstration.

What is the lesson of that case for this study? Is it not that here is a case of a state of chronic emotivity—which was pervading more and more the patient's whole personality, so that it was becoming difficult even to go out of the house at all, so that she could not go out alone—being entirely due to a particular stimulus which aroused an emotion only in a particular situation? We were here in the process of development of what has been called pantophobia—a fear of everything, which this patient would eventually have developed, which is said to be a constitutional emotivity and therefore inaccessible to therapeutics. In reality, this pantophobia, when properly penetrated into, was a particular individual phobia in a definite situation, the clarification of which enabled the patient to understand the psychological process which had eventuated in the emotivity, and we can, by a considerable effort of the will which enables her to grasp the new concepts, cause her to get rid of the secondary emotivity entirely. Therefore in such cases—and they are the vast majority—the emotive state is purely induced. It depends primarily upon perceptive elements; the patient has perceived the situation, just as the amoeba perceived a situation, a stimulus from which it recoils, because it creates in it a state of unpleasant feeling. The individual person perceives a

stimulus which creates a state of unpleasant feeling—an impression which he seeks to avoid. There is a teleological reaction which she does not know how to avoid, because she does not know the nature of the stimulus. Why? Because she is not possessed of adequate knowledge to correctly envisage that stimulus in its true relation to herself and to others. In other words, it is a fault of commission, which permits of the development of the kind of emotivity which we describe as morbid. Therefore the emotivity must be attacked, not directly by the soothing processes of substituting another emotion for it, because that does not destroy it; it only covers it over temporarily. It must be done by attacking its primitive force, which is one of cognition. Therefore the patient fails to appreciate the situation with which she is faced, and breeds from that situation an emotion which, under the circumstances within her knowledge, is perfectly legitimate and proper. We are, therefore, dealing fundamentally with a pathogen, a false belief, not an emotion at all. In Dejerine's book, which in many other ways is a path-breaker, he fails to take account of that fact; indeed, his reasoning is highly confused. We have the best prototype in the dogs of Pavloff's experiments, of which, of course, we all know.

It has been said that the emotion should cease as soon as its determinant has ceased. That is true, and in most cases that is what happens. The psychological stimulus from without which creates the emotion disappears, and the patient is no longer in a state of emotivity. Why in some cases does it not disappear? It is simply a matter of failure of resolution of the problem by the patient. The patient who has lost a dear one gradually is able to become reconciled to it, and to say, "Yes, we have lost this dear friend, but our life has to be lived, and there are others alive who need us, and so we should not always continue to mourn," and so on. And the other factor, so-called time, which means the gradual onset of comparative indifference, comes to the rescue also.

In the other case the stimulus does not actually cease; it only appears to do so. As a fact, the stimulus becomes more and more strong, and the stimulus is followed by the patient's recollections of the emotions. I will read to you a letter I had just before leaving, which very well shows that:

"Whenever I read anything that seems to corroborate my fear I can't wait for someone to help me to forget it. The trouble is that there is no certain thing that I have read or heard *apropos* of the same idea (that of fear) that has been lingering in my mind for years to terrify me. I should have talked to you long enough when you were here to allow these things to rise to the surface.

"I left the meeting that night partly because when I found you speaking about phobias I was afraid you might tell or delineate too clearly the effects of fear. Whenever I write or speak of it I want to hurry past it. I had to force myself to write out in a summary the exact words, lest thinking of it might make it worse."

[Alluding to a period of four months of treatment by a psycho-analyst without benefit. He had persisted in searching for a repression of which there was no evidence to account for symptoms of which the mechanism was clear enough.]

"After the psycho-analysis was such a failure, my will-power seemed to become more and more flabby. Then the war made it evident that the worst could happen; so it is difficult for me to get adjusted right away to the thought of even trying again to get better. However, under the stimulation of your visit I find some things much easier, although I cannot voluntarily yet put myself in a really difficult situation. Anyhow I am this much better, that I find myself considering such undertakings as a trip to a summer resort, which was hitherto fraught with too many dangers to be at all attractive, and I seem to be willing to enlarge my sphere in a way that I did not consider at all some weeks ago."

You see that there the patient realises very well how wishes might mount to sensitised receptor situations, and to fear of their import. And who knows that when she comes into contact with any matter which shall touch those receptors she will not pass into this panic? This patient, whom I saw for two days only and who had these panics, had had them since sixteen years of age.

Another person who had pantophobia was a man, æt. 27 or 28, who feared everything and was in a state of complete inadaptability on account of this intense emotivity. He had a strong belief that his condition was hereditary, because both on his father's and his mother's side heredity was extremely bad: there were asylum cases, all were neurotic, one brother died of epilepsy, and the other was a

tramp—left his home young for the purpose of being a tramp. Yet in ten days that patient was restored to efficiency because it was discovered that the source of his fear, though not a single incident, yet was a series of incidents induced by a very unwise relative who, having the bringing-up of the boys, believed that fear was a necessity for good discipline, and had the idea that only by fear could they be well trained. He therefore carried out stern measures and deliberately induced fear in the boys. This persisted in this man until he was 28 years of age, unknown to him in regard to its mechanism. This man has since faced most intense difficulties in securing his position in his profession, that of attorney in a large Western city. He has married, and has two children, and since the treatment has never had a relapse. That, therefore, is a very important case from the point of view of differentiating between the condition which we label "hereditary," and that which can be re-induced and re-conditioned. Our psycho-therapeutic measures are those which are adapted to the re-conditioning of patients who are in a state which we regard as morbid.

The PRESIDENT expressed the thanks of the meeting to Dr. Tom Williams for his very interesting contribution, saying that they were indebted to him for having provided them with an illustration of what he, the speaker, had called in his address the cortico-thalamic system of emotility. He suggested that the several papers down for this sitting should first be read, and then the discussion embrace the whole of them, the authors subsequently replying.

PSYCHO-ANALYTIC TEACHING AS ILLUSTRATED IN THE PSYCHOSES.

The following papers were then read :

Dr. W. H. B. STODDART, London, "A Brief *Résumé* of Freud's Psychology."

Dr. C. STANFORD READ, Physician to Fisherton House Mental Hospital, Salisbury, "Homo-sexuality."

Dr. W. REES-THOMAS, State Mental Institution, Rampton, Retford, "Sadism and Masochism."

Dr. W. BROWN, Professor of Psychology, University of London, Director of Psychological Laboratory, King's College, London, "Criticisms of Present-day Psycho-analysis."

Dr. H. G. BAYNES, Zurich, "Psycho-analysis" (read by Dr. Bedford Pierce.)

The PRESIDENT said he was sure all present felt greatly indebted to Dr. Bedford Pierce for his rendering of Dr. Baynes' paper, and, if it were the will of the meeting, he would ask Dr. Bedford Pierce to write a letter of sincere thanks to Dr. Baynes for having sent this very good and helpful contribution, so clearly putting forth some of the problems which confronted us.

Agreed.

AFTERNOON SESSION.—WEDNESDAY, JULY 28TH.

PSYCHO-ANALYTIC TEACHING AS ILLUSTRATED IN THE PSYCHOSES (*continued*).

Sir ROBERT ARMSTRONG-JONES, in the first place, wished to congratulate Dr. Menzies on having attained to the highest position which his fellow members could confer upon him, namely, that of President of this Association. He much regretted having missed hearing the Presidential Address on the previous day, but he hoped to read it when it appeared in the Journal. All at this present meeting were really friends; they knew each other well, and he thought speakers on this subject should be quite frank with each other. They ought not to be afraid of saying what was in their minds, and hearers ought not to take offence at anything which might be said. The special subject under discussion had raised, as all his hearers knew, very strong feeling, and, in his own opinion, it had been a morning of the strongest possible emotivity; they had had strong emotions running absolutely at random. He had ventured to write in *The Practitioner*

some time ago that Freudism in England was dead. He believed that statement to be absolutely true to-day, even though psycho-analysis was never more alive. He had been a student of Freudism for a considerable time, and he was also a disciple of his friend, Dr. Brown of King's College, whose work and lectures he attended long before the war. He felt when Freudism came to light that it was relevant to life on an Austrian or German frontier town, but was not relevant to ordinary English life. In the former case people did not live the life as we knew it; the men took little exercise, drank freely, and were emotional about each other's wives. He believed those who lived in the open would support him in the contention that Freudism did not apply to the British character. He came here partly in order to defend clean-minded children from sex aspersions; he was himself the father of a family, and he stated with all the responsibility he possessed, that there was no justification for the perverted sexual meaning read into the minds of children, a meaning which was practically full of dirt and the interpretation of which was filthy; it was untrue and not tenable. During the morning the Association had revelled in that stuff, and he congratulated the President on his courage in allowing members to come and give vent to it to-day. He was considerably relieved when the very different paper of Dr. Baynes was read. The President well described it as a charming paper; there was nothing Freudian in it. It was full of analysis without sex filth. He was also glad to hear Dr. Brown's balanced and convincing speech. It would help all who had studied psycho-analysis as he himself had done. One was sometimes asked, "Is repression a new mental mechanism?" Was psycho-analysis such a splendid thing, as it removed repression, brought this beastly stuff to the surface, so that it could be talked about and revelled in and would then disappear? He wished to remind his hearers that all the courtesies and ceremonies of life, as well as the ordinary conventions, depended on repression, which was a normal process, and he regarded it as a most important factor in normal education. To-day persons who opposed Freudism were ridiculed. He would like to take the mind of his audience back from psycho-analysis to see in what sort of atmosphere it had grown. He read in *The Times* that the Scottish pilgrims enjoyed Lourdes immensely, that there were more cures there than ever before at any pilgrimage, and that they compared most favourably with those of Christian science, and most favourably with psycho-analysis and with the Seale-Hayne treatment. With regard to the last-named, in the Out-Patient Department of St. Bartholomew's Hospital, where he was ably assisted by Drs. A. Feiling and Ernest N. Snowden, he had had several cases which were relapses from Seale-Hayne. At the same hospital he had a patient who had been more than once psycho-analysed, and afterwards had come to that department for further treatment. There was a great tendency, owing to the strain and stress of war, to become impatient for a cure and to ask for some remedy which would have an immediate effect in controlling and modifying human suffering. At first, 1 in 7 and later 1 in 3 of all soldiers discharged from the Army were invalided because of organic and functional nervous diseases. A jump was made at anything which was likely to assist a cure, and a place was given to psycho-analysis, owing to the very numerous nervous conditions brought about by the war. In relation to other forms of treatment, Dr. Brown referred to suggestion. In his, the speaker's, opinion—and this view was not held alone by himself—suggestion played a very considerable part in psycho-analysis. It had been said by Dr. Stoddart, that suggestion ought never to come into psycho-analysis, but it had been declared by another high priest that suggestion inevitably played a very important part in psycho-analysis. There were extremes on both sides, and students held a position between the two extremes. He, Sir Robert, had seen five cases of loss of speech—aphonia—with tremor and so on, in two hospitals. They were induced, after four months' residence there, to send these cases, not to the psycho-analyst, but to look for Queen Square Hospital, where a very eminent Canadian saw them. They were not psycho-analysed, and therefore they did not come into the recoveries from psycho-analysis, but into recoveries from faradism and suggestion. The psycho-analyst undertook to cure not only these cases, but others also. He, the speaker, had himself been psycho-analysed, but he was not like the lady who said, "I have been psycho-analysed for two years, and it is not over yet." In his own case it failed, not because of resistance on his part, or failure of transference. No one would accuse him of having no knowledge of mental cases; before his retirement he had

the care of a very large number of mental cases, and he had since seen many in private practice. It might be that he did not practise psycho-analysis in the proper way, but he considered there were three methods of applying it. There was the ordinary free association, in which the practitioner did and said nothing; then there was the stimulant word and reaction method, and there was the dream analysis. He confessed he was not expert in dream analysis, and therefore he was not an expert psycho-analyst. Still, it was useless in a large number of the cases he saw. The psycho-analyst claimed that this system was essential for the educationist, also for spiritual development, for social welfare and social regeneration. He was, indeed, astounded at the claims made for it, and he had not yet seen those claims substantiated. He wished to say a word about the curious terminology employed in this connection. Psychology had been known long before Freud came. He quite expected to hear, from certain quarters, that Freud was the greatest psychologist who ever lived. Dr. Brown, however, very wisely, as the speaker thought, qualified that. Others would associate him with Darwin and with Newton who discovered the law of gravitation and as the greatest discoverer of modern times. He had felt irritated by the new meanings attached to words which had become familiar as having very definite meanings in ordinary use. He referred to such terms as "cathartic," "transference," "resistance," "repression," "conflict," "condensation," "dramatisation," "sublimation," "complex," "lust gratification," "desire," "incest": they were part of the technical array used in psycho-analysis, but used with special meanings. There were a few terms employed in psycho-analysis which had come into common use. One was "complex." He believed that the term "complex" was originally of Austrian interpretation, and related to a group of ideas which Dr. Stoddart called a "constellation of ideas" in the unconscious mind. Sublimation was another important word, and had been in use long before Freud came in. Dr. Stoddart had given a list of the words used in the psycho-analytic method. He would like to ask whether Dr. Stoddart was in earnest when he brought this extraordinary vocabulary forward and asked the meeting to take them at their word-value. That gentleman said also that the unconscious was always struggling with the conscious to come out; it was a sort of playing dodge. He (the speaker) maintained that very often what was read by the psycho-analyst in the minds of other people was read into those minds from his own mind. Dr. Stoddart also said there was a psychic determinism. If this were true there was no opportunity for achievement, or ambitions or aspirations. Again, nothing came by chance; everything was pre-determined. To apply, as Dr. Brown did, certain revivals of memory to a child of one or two years was, he thought absolutely impossible. Those who held that had not taken into account the regional anatomy of the cerebral cortex, which was practically a smooth surface until the child was born; there were no pre-natal grouped associations. The child learned by associations and by experience in the world. One thing in regard to psycho-analysis was that there was a constellation of charlatanism about it. He said that deliberately, because he had asked practitioners of the art, "Will you show me the method?" No, the method is kept a secret; the technique is not evolved except upon one's patient! Dr. Stoddart is much more honest. I went to one or two of his demonstrations, and, with his usual honesty and straightness, he told us everything that went on. But I repeat it is surrounded by a constellation not of ideas but of charlatanism. A book had recently been written and published by a lady, who referred throughout to "my patient," though she was an unqualified woman. He thought the Medical Council ought to take notice of charlatans who practised psycho-analysis. In that book it was stated that psycho-analysis was a dangerous and risky procedure, one which "changed the character of the vital functions." For that reason the persons who practised it should be properly qualified medically. It was, however, practised by such people as school teachers or those who had been in that calling as lecturers, etc. With regard to dementia præcox, that was said to be a withdrawal from reality. He did not know what that meant. Much depended on the interpretation of the word "reality." To his mind reality referred to phenomena which were perceptual, and to speak of withdrawal from reality in dementia præcox was using terminology which he was unable to understand. One of the papers read that day was a very able contribution from Dr. Read, which was unobjectionable so far as libidinous

ideas were concerned, but even in this paper he thought unsavoury complexes were worked up in a manner which he regarded as quite unnecessary. Several times that gentleman referred to "the ego"; but there was not one ego; there were many—as many as there were complexes in the human mind. The terms used in these contributions ought to be precise, and should be explanatory. Paranoid development was quite capable of explanation without the introduction of these offensive, obnoxious, harmful and dangerous Freudian methods. He repeated what he sincerely believed—and he was supported in that belief by Dr. Brown—that Freudism was dead in England, though he confessed that psycho-analysis was never more alive.

Dr. GEORGE ROBERTSON said he spoke this afternoon with a considerable sense of hesitation, not with any authority at all; he came to learn and not with the idea of speaking. He thought he could claim the indulgence of the meeting with a greater reason than Dr. Williams did. That gentleman said his dynamic energy had been dissipated by the intellectual conflicts he had had, but he (the speaker) felt he had been reduced to pulp. The prolonged account of psycho-analysis from these distinguished gentlemen had given him, he feared, intellectual indigestion. He spoke more as an asylum physician than had those who had gone before him. He wished to accentuate, in the first place, the great distinction there was between a true manifest psychosis and a psycho-neurosis. In the last number of the *Journal of Mental Science* the relation of the two was pointed out. There was no doubt, of course, that the two conditions ran into one another, but the distinction remained, and that made a great difference in the applicability of psycho-analytic methods to the treatment of these conditions. Psycho-neuroses were very amenable to psychotherapeutic treatment, such as psycho-analysis and other methods such as Dr. Brown had mentioned. On the other hand the true psychoses, when definite and developed, were very unamenable to psycho-analytic treatment. The person realised there was something the matter with him, and he came for treatment, and in order to get well he co-operated with all one did, and was in a mental condition to do so. But the person suffering from manifest psychosis failed to realise there was anything the matter with him; he thought his mind was normal. If one suggested to the paranoic that he was suffering from delusions, he became indignant and declared what he experienced were all true, and that it was nonsense to say it was a sign of disease. Therefore he did not co-operate with his physician, and it was impossible to practise in his case these psycho-analytic methods. The explanation for this was neatly given by Dr. Brown in his speech. This appeared to be in opposition to Jung, who stated that he cured many cases of dementia præcox by these methods. Some years ago, before the war, he (the speaker) went to see Jung, and, amongst other things, he said he cured these cases of dementia præcox. He asked Jung how he could do that when practically the definition of dementia præcox according to Kraepelin, the man who had put the condition before the profession, implied a condition of incurability. The answer of Jung was that he had the cases in the earliest condition. Jung had made the statement that dementia præcox was allied to neurasthenia and psychasthenia. Therefore he (Dr. Robertson) thought the cases which Jung called dementia præcox were those in such an early stage that no one in this room could diagnose them as such. Another point to accentuate this difference was that these cases of psycho-neurosis were not an early stage of insanity, and they did not tend to pass into insanity. Years ago, at an international congress in France, this question was brought up, namely, whether cases of phobias and compulsion-neuroses tended to pass into insanity. He was sure all who received cases in consultation enjoyed a considerable income from patients who came suffering from these conditions. The report of the committee which inquired into this was to the effect that these cases did not tend to pass into insanity, and that the percentage of them which passed into insanity was very little—not larger than would be expected in ordinary persons with a neurotic inheritance. Indeed, one of the text-books stated that the occurrence of one of these psycho-neuroses was a preventative of insanity, though he did not agree with that. It was important to bear the difference in mind with regard to so-called early treatment of insanity. Most of the cases which would enter these wards for early treatment would not be cases of insanity, but of psycho-neurosis. He thought the majority of those present would agree with the statements made by Dr. Williams in his address that morning. It was an exceedingly clear and convincing

account of these conditions. He agreed that a faulty cognition was usually at the bottom of these cases, and that, secondary to this, there was the emotional condition. But he felt inclined to agree with Dr. Brown that the emotional condition in the majority of these cases was the more important condition of the two. He would give a very simple illustration in a case in which the condition was scarcely morbid. A friend told him that when she was a young girl she went into the kitchen and saw the cook preparing something for dinner which she had never seen before, and the cook answered her question by saying it was a cat; she was preparing a rabbit. The girl was so horrified that she had never since been able to eat rabbit. That was a morbid state allied to an obsession or phobia, and it was hard to see where the faulty cognition came in there, because when the rabbit was served on to the table the girl knew quite well it was not cat. The idea may have existed in her unconsciously. There was no doubt, however, that the emotional condition was associated with a feeling of horror and disgust. He could illustrate this by one case which was being treated by him at present. He had not selected that illustration specially, and he would be sorry if he offended Sir Armstrong-Jones by relating it. The young woman came to him for help, and he was bound to do what he could for her, and he would explain how such a case was useful in the discussion this afternoon. She came to him some time before the war stating that she had great trouble with regard to her underclothing. She could not make up her mind what underclothing she should wear, what pattern, what thickness. She said the problem made her life a burden. She was a domestic servant, and she could not undertake good situations because she was so depressed, and she sometimes had an inclination towards suicide. In the first place, she did not know whether she ought to wear drawers or combinations; secondly, she did not know what material they should be made of, whether of coarse, stout material or finer stuff. That was a considerable time before the war, and he did not understand how the condition should be treated. He asked her if she had any intimate friends. She replied that she had such a friend in another woman whom she knew, and he then told her to get her to settle the matter for her, and dismiss the subject from her mind; she need then feel no sense of responsibility. For a time she followed this advice, but she probably grew sick of the matter, and he heard nothing more of her for a long time afterwards. It was obvious to him that he was not treating the problem properly; he was really evading it. Sometimes he had got rid of a difficulty in that way. One lady came to him with a dusting mania. She would dust the drawing-room twenty or thirty times a day. He got rid of that difficulty by sending her to a house and giving instructions that the moment she started dusting she must be turned out of the room, being told that it would be an insult to start dusting anything, as it amounted to an insinuation that it was dirty. She then turned her energy to weeding the garden; she would not allow a weed to grow in the garden. That was a better obsession to get, because she could only go out weeding in the daytime and when it was fair weather, and there were only a limited number of weeds growing in the garden. Those were the methods employed when one did not know how to deal with such cases. The first young woman came to him a short time ago, and now he could look at the question from a different point of view, and find out what was the origin of this mental condition. Asked when the peculiarity occurred, she replied when she was five years of age. The first instance of it occurred when she was going to school, and she saw a woman—whose name she gave him—who looked very bulky. She did not like the shape of the woman's figure, and she got from it the idea that she must be wearing a large quantity of underclothing. He (the speaker) suspected there was something more, and he asked her about her brothers and sisters. He learned in that way that at about that date a brother had arrived in the family, about four and a half years younger than she was. He therefore had very little doubt that this woman had noticed her mother had grown very bulky, and later that she got more slender after the baby appeared on the scene. One might say a child of that age would not have such ideas, nor regard them as anything wrong, but she had done so. At that time she also had suffered from a minor sort of sexual manifestation, and a boy had taken a liberty with her clothes, and the milkman, a fairly young boy, had called her an objectionable name with a sexual meaning, and this had affected her very much. As she was called that name three or four times, she thought the boy who had assaulted her had told this milkman what he had done to her. Then

promptly, without any suggestion, she told him (Prof. Robertson) that her mother had scolded her because she had broken a crystal jug. She admitted that the jug had a reference to getting the milk from the milkman and not to the boy. These things occurred at that early age. There was something sexual and unpleasant about it, and she felt it very much, and she had not said anything to her mother about it until she was twenty years old. She admitted that this feeling of bulkiness had at one time suggested child-bearing, and she tied a tape round the breast, which showed it was swelling of the figure, not due to her underclothing. The explanation, therefore, was that this woman had a dread of pregnancy and of sexual intercourse. When she wore underclothing of a bulky and coarse nature she had the feeling that she was pregnant, which made her very unhappy. She could not continue in this condition. She discarded these clothes and wore the thinnest she could get, but in that condition she felt she was more open to sexual assault and intercourse, and therefore she was miserable for that reason, and so put on some more clothes. The first point was its faulty cognition. He had been able to discover what was the true reason of this unhappiness; it was this question of pregnancy and sexual intercourse or assault, whereas for all these twenty-three years she had imagined it was a problem connected with her underclothing. He believed he had discovered the true ideas which were in her mind, and that she would now tend to recover. As Dr. Williams suggested, when a patient was placed on the horns of a dilemma it gave rise to much unhappiness. The case he had related was like that given by Dr. Williams, of agoraphobia and claustrophobia. His (the speaker's) patient was not yet cured; she was in a state of resistance; no transference had yet taken place. He believed that in all these cases there was suggestion; the mere fact of the patient coming to the doctor meant he or she had faith, or hope, or whatever it was, that whatever the doctor did or advised would bring benefit. He believed that suggestion received in that way was more powerful than suggestion which was purposively given by the doctor. If a patient, as a result of the visit, put one and one together, that was one of the most potent forms of suggestion there could be. A dubious form of suggestion was that conveyed by arguing and reasoning. With regard to insanity and the origin of the symptoms, there was a point he regarded as important and which had not been referred to. There had been a discussion as to whether the symptoms were toxic in origin, or whether they were psychogenetic. He thought there must be differentiation. He would like to refer to the well-known views of Hughlings Jackson on this matter. Someone had said Hughlings Jackson pointed out that the study of dreams would enable one to understand insanity, and Maudsley, in one of his editions of *Pathology of Mind*, had a long chapter on dreams. That authority said he thought the study of dreams would lead to the elucidation of insanity. He was sorry to hear that Sir Robert Armstrong-Jones did not attach the same importance to dreams. Hughlings Jackson said there were two classes of symptoms—the negative and the positive. In the case of toxæmia the symptoms were, firstly, those of disorder and impairment of function, and in the end destruction of function. That was the symptom produced by the disease. But there was also a negative symptom produced, which was not apparent, and that removed control. One had then the personality of the individual laid bare in all its nakedness, with his instinctive feelings uncontrolled. These might be slightly excited by the toxin, but even without that toxin they asserted themselves, because they were uncontrolled: they were symptoms of the disorder. In this condition the disorder produced by the toxin was a destruction of function; it was not loss of control, for that was not apparent. The excitement, the delusions, and the hallucinations were not produced by the toxins; they were uncontrolled and showed themselves. That was the reason that no two people got drunk—showed the symptoms of drunkenness—alike. They all imbibed alcohol, all suffered from loss of control, but no two such people behaved alike, because the personality was not alike. One became elated and excited, the other weak-kneed, or obnoxious. His point lay here. It was desirable to remove the toxin, but the symptoms had not been produced by the toxin, they were produced in the unconscious. In Bevan Lewis's book, published thirty years ago, he talked about failure of object-consciousness and frozen subject-consciousness. The high levels of consciousness were confused and destroyed by the toxin, and so the unconscious asserted itself. In insanity one could not do much in the way of cure, but one could study the development of

symptoms in the case. If one could understand why the patient had delusions one could understand his conduct, and one's interest in these cases was increased enormously. He had a case of manic-depressive insanity, complicated by some hysterical symptoms. With his knowledge of the Freudian mechanisms, which were the important things to remember, he traced back the origin of the trouble to an occasion when there was a young man living along with this female patient for six weeks, and she was in love with him. He went off at the end of six weeks without proposing; she wrote him an affectionate letter, but he replied that there was nothing in his attentions. When she received this letter—which she destroyed—she assumed he proposed to her, and she accepted him. He suggested to the mother that this was the start of the matter. She said they went abroad, and at all the hotels she was leader in the tennis and the dancing. He suggested to the mother that it was because she was acting the part of the newly-engaged young woman about to get married. This young woman had started this phantasy, and when by herself she lived her whole life in accordance with it. She was employed in war work, and became ill, and hence she was no longer able to control her mind in the way she did before, and she now began to suffer from depression. She had repressed this refusal of marriage, became depressed, and tried to commit suicide. Then she came to me. She imagined she had been an immoral woman. In imagination she had had sexual intercourse with the man, and she thought the nurses accused her of immorality, in support of which they brought her scarlet geraniums, making it clear that they regarded her as a "scarlet woman." Another case was very interesting, in that it not only indicated Freudian mechanisms, but symbolisms of sexuality. He thought anyone who studied Freud on dreams, and who analysed his own dreams and studied the symbols of them, could not fail to be convinced of the truth of most of what Freud said. And he would associate himself with Dr. Brown in saying he looked upon Freud as one of the greatest psychologists who ever lived. He would not like to say he was the greatest of all. If his hearers did that to themselves, and were perfectly honest in the process, they would have no more hesitation in believing everything about these sexual symbols than they had about believing anything else. The particular case he now wished to mention was that of a young woman who had fallen in love with an officer, and had become engaged to him. Two or three days after this the officer presented her with an engagement ring. On that day she suffered from influenza, became acutely ill, and passed, in a few days, into a condition of delirious insanity, being unconscious of her surroundings. He, the speaker, was asked by the doctor to see the case. She was talking a great deal, but only in short sentences. If Dr. Clouston had been there, he, with the ideas on insanity which he professed, would have declared her to be a perfectly incoherent person, who was talking nonsense. One knew what each phrase uttered was: the utterances were about ridiculous things. But he, the speaker, had not been more than a second or two in the room before he had realised that the talk consisted of nothing but sexual symbolisms. When he came away he reflected on the interest of the case: he told the matron what the remarks were, and told her he wished a nurse to write down the phrases exactly as they were spoken. She advised that the nurse should not be told what they were about. The nurse wrote about 200 consecutive sentences of the patient, and he, the speaker, now had them all arranged and tabulated. Three-fourths of them were nothing but sexual symbols. It was a very remarkable thing to find a delirious woman talking 200 consecutive sentences in which three-fourths were sexual symbols. And it was not Freud who introduced these symbols. One had only to read Balzac, who employed them largely to refer to sexual matters. In a music-hall a song would appear innocent to the innocent, but to anyone who had a knowledge of these symbols the case was different. His position or attitude towards this form of treatment was the following: in the case of psycho-neuroses there was no question, as he had indicated in the case of the young servant-girl who consulted him, that it opened up a most widely useful field for cases which, in the past, had been in unutterable misery, and had also been a great trouble to the doctor. These patients had gone to the general practitioner, who had not known how to treat the condition, and they had been shunted on to somebody else. And they had, in many cases, gone to charlatans. The methods introduced to the profession by Freud had enabled those dealing with such cases to understand and help them. When they came to cases of manifest psychosis there was some diffi-

culty in curing them, though he thought that in the intervals of manic-depressive insanity some good could be done to them, even if they could not be cured. The symptoms could be understood, as also their genesis. Moreover, the cases became, by virtue of this knowledge, much more interesting than they had been hitherto.

Dr. D. BOWER said he wished to express his opinion on Dr. Tom Williams' address, which he regarded as an extremely good one. He was sure the general view was that it was very practical and interesting. He had always held that hereditary insanity was, in many cases, more curable than the cases in which such a history could not be obtained. He had been accustomed to say to patients' friends that in cases of hereditary insanity it did not take much to send them over the border, neither did it require much of the right treatment to bring them back to normal, which was contrary to views which had been brought forward at that meeting.

Dr. BEDFORD PIERCE said it was not his intention to speak at any length in this debate, but there were two observations he would make. He thought the position with regard to psycho-analysis and the psychoses could be illustrated by a short and simple story. A nurse, who was being anæsthetised for an abdominal operation, remarked as she was becoming unconscious, "Don't make a fool of yourself, father." This remark evidently had reference to her father's second marriage, and the nurse's subconscious mind was dealing with an incident in her past life. That gave an explanation of the mental symptom, but said nothing about the anæsthetic which was the cause or means of the revelation. In most of the psychoses he suggested there was this other factor. Analysis might elucidate the symptoms wonderfully, but when the other factor was toxic or degenerative the psycho-analyst could not deal with it. In the excellent case which Dr. Robertson narrated it would appear that the influenza which was the occasion of the delirium had been ignored and this was more important than the sexual symptoms. If they were not careful they would be confusing the essential factor with the unessential. His second purpose in rising was to ask a question. Perhaps he was old-fashioned, but he had never been able to understand one matter which seemed accepted without question in the Freudian theory—that because a thing was repressed, it must necessarily be preserved, to reappear somewhere else. Freudians seemed to have the idea that there was a psychical energy, or libido, which behaved like water in a vessel or series of vessels: if pushed out of one place it appeared in another. He did not see why mental processes should be so regarded; he thought a mistake was made in using physical terms, such as transference, or substitution, or outflow or displacement in this modern psychology as if they applied to physical activities. He asked the Freudians present, or the apostles of the new school, if they would explain why it was necessary, when an idea was repressed, that it must reappear somewhere else. Substances like gunpowder, with great potentialities, might remain latent to the end of time, failing the exploding agent; why, therefore, did it follow that because a person had repressed an idea, it must explode in some way or other? He did not think it necessarily followed at all. That he regarded as a fundamental difficulty in the Freudian psychology.

Dr. F. H. EDWARDS said the President had suggested at the conclusion of the papers that speakers would be either critics or supporters, or would at all events come prepared to ask questions. He placed himself in the last class, because it must be obvious that most working physicians, for two reasons, could not practise psycho-analysis. One reason was, that the type of case which came to them was not suitable for it, and the other that the time available for each patient did not allow of it. He had learned, from Dr. Stoddart's paper, that it took months to analyse a person in this way, and that it might require as long as three years. But he did not know whether Dr. Stoddart was the most successful practitioner of the system, because recently, after only a few minutes with a certain psycho-analyst who should be nameless, that gentleman informed him that he had the motor complex. In the avoidance of suggestion in connection with analysis, surely some synthetic process must follow the analytical, or was it done by some simple or complicated process of setting free the complex? The second question he was anxious to have a reply to was: Why were dreams symbolic? Ordinary waking thought did not take place in symbols, nor even daydreams. Castles built in the air were not constructed

with symbols; then why did we dream in symbols? The constant washing seen among patients in asylums had been mentioned. He had seen it stated that it was symbolic of a feeling of impurity in the mind of the patient, which there was a constant desire to wash away. He suggested to Dr. Rees-Thomas that the causation, to some extent, of sadism might be referred back to a far-away atavistic period, and that it was therefore a biological problem. He knew that mention was made of horses and other animals exhibiting sadistic and similar propensities, but one could go further down the scale and view the case of spiders, especially the praying mantis, for among them the bride, having satisfied herself, eats her husband. He had been very interested in Dr. Brown's speech, especially his remarks about the revival of infantile emotions, as he had seen a limited number of these cases, and he had observed not only a revival of the memory of infantile emotions—he did not think the emotions themselves could be revived—but of infantile forms of speech at the same time. He had witnessed that quite commonly.

Dr. R. G. M. LADELL said that Sir Robert Armstrong-Jones' attitude towards Freudism was that which was normal to all who approached this question; it marked a phase all passed through who thought upon the subject and read about it. It at first appeared to be repulsive, to reek of muck and bad habits, and to justify such epithets as Sir Robert had applied to it in his speech to-day. But if the subject were patiently and thoughtfully pursued, and the student were sufficiently courageous to submit himself to analysis and studied those about him, particularly those who were nearest and dearest, who afforded the best material for such study, he would be forced to find that Freud was justified in his contentions that these tendencies actually did exist. When resistance to enlightenment was carried to such extremes and for such a length of time as happened in some instances, one must conclude that such resistance was not normal; it was almost pathological. Sir Robert Armstrong-Jones mentioned the innocent mind of childhood. It was true it was innocent. Children were innocent, and that was the reason they were indecent: the "indencies" of childhood were natural and innocent. As was remarked earlier in the meeting, if these tendencies were carried into adult life they became indecent. Therefore there was nothing repulsive in realising that children had these impulses, because, being innocent, they were quite free from any consciousness of indecency or shame. It was somewhat difficult for an inexperienced speaker to collect notes such as he would like to in such a meeting as this, but he would state, in regard to his own experiences, that he began, many years ago, by taking an interest in hypnotism, which was the only method of psychic treatment he then knew of. He treated patients purely by this, and in many cases with very good results. In some, however, the procedure did not have any effect. Later he found that instead of the bludgeon-like downright hypnotism one might use with more effect the persuasive method, of which Dubois was the chief exponent. There was no doubt that many cases of neurosis would respond very well indeed to that method. Latterly, however, it had been forced upon him that, although in many cases one could be content to deal with the condition in that superficial way and clear up the manifest neurosis, yet there were many cases in which it was necessary to pursue the investigation still further and carry out psycho-analysis, and in that way get at the root of the trouble. Failing this, it did not seem likely that the patient would be done much good. It was not necessary to make up one's mind in any given case at the start that one would carry out psycho-analysis; he preferred to treat each case on its own merits. In some cases one could by appropriate means clear up the surface symptoms, and this would enable the patient to adjust himself to his environment. But in other cases the neurosis went so deep that deeper methods were called for. The practical working method, therefore, was to draw something from all schools, even in a case of war-shock. During the last few months he had been particularly concerned with cases in a pensions hospital. Most of the cases one could deal with adequately by clearing up the amnesia over the war period or by suggestion, either in the hypnotic or in the waking state. But afterwards there persisted, in many cases, a neurotic element, so that one was not justified in turning the man loose on the world to earn his living. This neurosis must first be cleared up. One found in many cases that the war-shock symptoms were based upon some incident in early childhood. He had one case which was of interest as

showing the superficial way of dealing with these neuroses. The man was an artist; he had the artistic temperament, with all that implied—he was a highly-strung, fragile individual—and he was the last person one could connect with scenes of bloodshed and stress. He had joined up as a private during the war, and had spent two or three years of hellish existence in France, with the natural consequence that his nerves were shattered. When he came back he was unable to apply himself to artistic work, and he had no confidence in himself, either as an executive artist or as a teacher; he had also been teaching in an art school before the war. He suffered much from sleeplessness, and he (the speaker) found out that as soon as he closed his eyes what troubled him chiefly was a vision of two things which actually occurred when he was at the front. They were sufficiently horrible to have impressed anybody, and when one considered the temperament of this man it was not surprising that the memory of them vividly remained in his mind, haunting his waking hours as well as his dreams. In his first charge he bayoneted a German twice his size, who fell on him and covered him with his blood. The other incident was that he spent some days in a shell-hole, which had been consolidated. A few hundred yards away, on his right, he could see a dead German and a dead Englishman, each with a bayonet sticking out of him. He felt that if he could only push them over they would cease to haunt him. They haunted him in his dreams, and he woke up just before they fell. He (the speaker) was able to do him much good by first of all talking to him, taking a new view-point on many of the things which troubled him. One of his troubles was that while he had been away a conscientious objector stepped into a good job which he used to have. He tried to point out to the man that all the experiences he had passed through would help to broaden his mind and enable him to express himself artistically and that no experiences of any kind could be wasted. That appealed to him and greatly improved his outlook. With regard to the two visions in his mind, he told the man to sit down and make a black-and-white drawing of them. This he did, and thereafter they ceased to haunt him, and latterly he had been producing some very good work. There had been references made in this discussion to a toxic factor in these psychoses or neuroses. One must conclude that this was a very strong factor indeed, not only in the neurosis in everyday life, but in war-shocks also. A large percentage of the cases he had at the neurasthenic hospital he found had either P.U.O. or trench fever or influenza shortly before they acquired the shell-shock. Therefore one must recognise in all these cases a predisposing and an exciting factor. The exciting factor might be the explosion of a 5.9 shell in their immediate proximity. The predisposing factor was in many cases toxic in origin. Where one did not find P.U.O. or other sepsis there was usually oral sepsis. One of the most septic mouths he had ever seen was that of a man who had been aphonic for three years. He did not feel any doubt that in his case the oral sepsis kept his other condition going. He brought that man's speech back in ten minutes, though of course he could not cure his sepsis in that time. In that man's case there were many factors, including oral sepsis and shock. He was satisfied that his mental stability was not fully restored when his speech came back, therefore he investigated further, and found he had a deep underlying complex. Therefore one could not have a hard-and-fast rule; the practitioner in this domain must keep an open mind, and try to learn all he could from all sources and all schools, adopting what might seem necessary in a given case.

Dr. E. S. PASMORE said he would confine his few remarks to one matter which Dr. Stoddart spoke of in his paper. He would not make a running commentary on psycho-analysis, but would speak of results. Dr. Stoddart said that early cases of dementia præcox were cured. Those who had made a study of the pathology of cases of dementia præcox could not accept that statement. Those who had the privilege of attending the Medical Congress at Cambridge and hearing Sir Frederick Mott in a demonstration he gave on dementia præcox would find it difficult to believe in its cure. Sir Frederick there stated that he had studied thirty cases of the condition, and as a result of his pathological investigations he concluded it was a question of undevelopment, not only in regard to the sexual organs of the body, but also the brain. With regard, therefore, to the question of subjects of dementia præcox withdrawing from reality, they never had a reality, for from early childhood there had been no real development. As a mental

specialist he, the speaker, could not accept the claims which adherents of this school made as to the curability of dementia præcox. He agreed with Prof. Robertson that psycho-analysis did good in psycho-neuroses, but if cases were cured they could not have been dementia præcox; the diagnosis of the psycho-analyst was wrong. More data were required before the conclusions put forward were accepted.

Dr. A. HELEN BOYLE said she would like to say a word on one or two points. She had long been in charge of thirty-seven beds of cases of early nerve trouble in women, and during the last twenty years she had had about ninety such cases continuously under care. She would join issue with Dr. Robertson over one matter. It was not yet proved, she contended, that in the early stages the true psychoses were not cured. It seemed to her that some of the cases which she had come across in her reading had shown definite signs of early psychosis. They must have begun somewhere, and obviously they did not begin when the patient was certified. The great difficulty was, that the people who were most interested in cases of psychosis were those who never saw them until they had become established and well-developed cases. Her cases were non-certified cases, and they were sent to her because they were not yet fit subjects for an asylum. Yet at that earlier stage they required treatment. She believed all those were cases of psycho-neurosis, and there were a fair number suffering from the psychoses. She was sure some of the early cases of manic-depressive insanity were cured. The last remark brought her to speak of a second point which was apt to be forgotten, namely, that in nearly every case of disease it was Nature's effort to cure something or other which was not in harmony with the patient's surroundings. She considered that applied to mental just as to other diseases, and she was not sure that, in rushing in hastily to cure them, they did not sometimes make the patient worse. That had been the case repeatedly in physical diseases. She did not know whether the case of dream-lovers mentioned was cured. She had seen many such, and she thought it was risky to rush in hastily and do what the psycho-analysts did, namely, tell the patient at once the absolute and complete truth about himself or herself. The psycho-analysts say they do not tell them, but they encourage the revelation. Perhaps she, the speaker, saw mostly failures, because, of course, successes did not come to her. She had a patient sent to her from London, who had been working up to a certain date, when she had unaccountably become strange and odd. She was on night-work and it was thought she was suicidal. She was not so, but was stuporose and melancholy. When she came to the speaker she could not make anything of her. She was treated in the ordinary way. The chief difficulty was that she could not take food. That case occurred some little time ago, when she did not know so much as she did now about psycho-therapy. The patient stayed at the institution a little time. As she improved she commenced to work, and finally was more or less put on the staff, but still she was not right. She thought the work was not satisfactory for her, *i.e.*, that she was not "letting off enough steam." She advised her to take up massage, which was an extraordinarily useful form of sublimation for many patients of this kind. She had told the speaker that she was engaged to be married, and she used, she said, to go and see her *fiancé*. Little else was said about him; he never visited her at the institution. Half-way through the course of massage she heard he was very ill, and asked whether she might go to see him. Permission was given. A little later she said he was dead; could she go to the funeral? To that she (Dr. Boyle) also consented, but she felt uneasy about her. She did not come back according to promise, and when she did arrive it was at 1.30 a.m., drenched to the skin, but comparatively calm, and went to bed. The speaker did not say anything to her that night. Next morning the patient said she had something to tell her. She said, "I want to tell you I never had a *fiancé* at all." After an interval she asked the patient exactly what she did when she went to town. She then told her that she bought a lot of beautiful flowers and went to a cemetery she knew and put them on a grave there which bore no name. Then she lay on the grave all day with the flowers though it rained all the time. She stayed there until she was turned out in the evening and was only able to catch the last train. From that day she had been well. That case illustrated a method of natural recovery, though it was not worth while to let a case go so long. She did not think the crutches of such patients should be snatched away until one felt sure they had a method of sublimation at hand. She felt sure they would, in a natural course of events, kill their dream-lovers. And supplying a means of

sublimation she regarded as important. In some cases that was not done and the result had been disastrous.

The PRESIDENT said that before calling upon the openers for their replies, he would like to read to the meeting the letter of regret for non-attendance at that meeting which had been received from Prof. Friedländer. Let the meeting be fair; the statement had been made that psycho-analysis was all very well for the Germans, but it would not do for Englishmen.

DEAR SIR,—I am very sorry indeed not to be able to take part in your Congress, and not to hear the paper by Dr. Brown on "Psycho-analysis."

With us in Germany it has become a habit to connect the name of Prof. Freud and his followers only with the notion of psycho-analysis. I have taken great interest in the doctrines and errors of the Freudian school ever since its beginning, and I have been engaged with psychotherapy for more than twenty years. I have always asserted that the origin of psycho-analysis goes back to olden times (Buddha, Greek philosophy, etc.), while Freud is the father of "*Sexual psycho-analysis*" and the representative of "*Pan-sexualism*."

I do not exactly know what position the English psychologists, pædagogists, and physicians take up. I only know that my colleague Sir F. W. Mott—whose merits are so great among others in scientific research—declines Freud's doctrine. In Switzerland, Bleuler and Jung—especially the latter—have turned away from Freud, and Monakow and Bing have done so from the beginning. In Holland a critical attitude was early adopted; not so in America. Many doctors in Germany are occupied with the study of Freud's psycho-analysis. Most of the "Kliniker" and neurologists reject it absolutely or attribute to it only a very limited value. Many well-experienced psychologists think this kind of psycho-analysis incomplete, without sufficient foundations, or directly wrong and pernicious.

From different papers I am sending you my position will be made clear. (Enclosures.)

When I read my paper at the International Congress at Budapest in 1909 there was no opposition. A motion was brought in that the Congress should resolve to *decline Freud's doctrines*, but I dissuaded it from doing so, as scientific theories cannot be fought out by resolutions, but by searching for, and finding, the truth. Several present at that Congress who agreed with me have since joined Freud. Freud gave five lectures on his doctrine in America, and in 1913-14 it was my intention to go there and demonstrate the other point of view. The war, however, intervened.

If I take the liberty unasked to convey my experiences, may my vivid interest in medico-psychological problems be my excuse for so doing. Whether my colleagues in England share my views or not, nothing but profit can come from a comparison of different experiences.

The psychological foundations of Freud's doctrine stand or fall with his interpretation of dreams. His views are full of spirit and stimulation, but the value of his book on dreams must depend not on its literary, poetic qualities, and style, *but on the proofs* of its assertions, which are neither convincing nor scientific. Doubtless the observation of dreams forms part of the psychic observations in general, but I think it is wrong to construct a psychological doctrine on dreams.

The importance of sex and of "Verdrängung" (?) is certainly greater than one generally thinks. The "Neurosen-Sexualität" maintained by Freud with its Sex-symbolism and father-mother-incest complex in children goes too far. The idea of conscious sex of unweaned children seems absurd; it is not proved and perhaps not provable. At the best value can be given them as hypotheses, but on hypotheses no doctrine can be built.

Which position does Freud's psycho-analysis occupy *as a method of therapy*? This can only be judged by those who know Freud's books well and have tested his methods. I have treated many different forms of psycho-neuroses with all the psycho-therapeutical methods according to the type of case. Just as in 1909, I can now say that, based on my records, I certainly think it quite wrong to attribute every neurosis to a sexual cause (sexuality being taken in its widest sense as Freud requires it). This and the experience gathered during the war as a consultant nerve specialist in numberless cases of "Kriegs-Neurosen" prove to me that the whole structure of his doctrine stands on uncertain ground.

Freud's followers have gone so far as to maintain that *only sexual psycho-analysis is able absolutely to heal the neuroses*. I declare this without reserve to be *undoubtedly wrong*. For the investigation of the psycho-neuroses we certainly need a detailed analysis, which must include the sexual life according to age. But we cure even very difficult cases by psycho-therapy applied accordingly, without a dissection of the sexual life, and without months of searching the dream life. Much has been said about the dangers that lie in auto-suggestion and suggestion of Freud's sexual analysis. If I have succeeded in healing one suffering from gravest astasie abasie for eighteen years, and in removing or mitigating obsessions which have withstood every form of treatment for decades, enabling the patient to work and live normally, this proves that Freud's psycho-analysis is not the best method of psycho-therapy.

With those superficial remarks I must content myself. In my next communication I shall produce the clinical proofs for my assertions, and—illustrated by my cases—the successes of my treatment which I have attained by employing different therapeutic methods.

I should be obliged to the Association if they would send me the papers and the result of the discussions.

I hope your proceedings are very successful.

I am,

Yours faithfully,

A. H. FRIEDLÄNDER.

Freiburg in Baden,
Deutschland;

July 18th, 1920.

The PRESIDENT said there was need for a good deal of clear thinking in dealing with this subject. Reduced to the most fundamental elements there were only two primary emotions, attraction and repulsion, and only one instinct, that of self-preservation, of which the sexual was a sub-division. He himself, like most of those present, was slowly reverting to the undifferentiated homosexuality of the child. As age advanced and the sexual powers waned they all sublimated their activities in one direction or another different from that followed during the zenith of life; some took to public affairs, some to literature, others to art or science, to farming or wood-carving or music. These sublimations were, no doubt, present all through life, but earlier on their basis was found in the heterosexual, later on in the homosexual. The same psychic result might accrue from various instincts if the circumstances, in this case advancing years, were changed. It was the glory of the Claybury School—Mott, Bolton, Watson and others—that they showed the mechanical basis of all these higher associations, which he, the speaker, had tried to hint at in his address of yesterday. Watson showed that the infra-granular layers of the cortex passed almost unchanged through the mammalian phylæ, and from these earlier undifferentiated layers, the supra-granular were gradually built up; and he, the President, tried to show that he thought the infra-granular were mainly the places in which the ancestral memories—the instincts—were stored up. In the dog and cat, and especially in man, one got the supra-granular layers very highly developed, and with them the possibilities of association and symbolism, results of, and perhaps divagations from, the original beginnings of these instincts. So it came about that in old persons, in whom, as Mott showed, the lipoids of the testicles were greatly diminished, there was a corresponding want of association—a corresponding fading away of the newer associations. And in senile dementia there was a retrograde return to the practical dominance of the infra-granular layers. For a similar reason this was found in idiocy. It was also the reason why homosexuality in the young child was a quite natural and innocent instinct, because the sexual aspirations and feelings of adult individuals were psychic developments in the supra-granular layers. The psychic sublimations might have no apparent connection with the original instincts, which were concerned in the propagation of the race. Our ideas of decency, bestiality and so on were not built on instinct, but on the supra-granular layers of the cortex. If members would understand this, exhibitionism in the child, such as stripping under the dinner table and emerging naked, as a great and respected monarch was said to have done on one occasion, would be viewed as a mere childish incidence of sexual instinct. But why call it bestial?

It was merely instinctive! Surely it was the judgment of the association, the supra-granular, layers of the cortex which introduced this idea of indecency into sexuality. One must throw oneself back into the original position of the innocent child before one was in a position to discuss these things, many of which could be explained physiologically—not the ultimate results, but the physical basis at any rate. The emotions could not be remembered, but the physical foundations could. In other words, the physical foundation which originally constituted the emotion in the thalamo-striatal system was still there, and it could again produce an emotion. That, however, did not necessarily mean the memory of the emotion, but an emotion of like character arising from the cause which originally existed in association with the first emotion. Sir Robert Armstrong-Jones had said that in childhood the cortex was not convoluted, but he reminded that speaker that the infra-granular layers were present at birth. (Sir Robert Armstrong-Jones: I agree, but sex is not the only instinct.) The infra-granular layers contained within them the instincts, and if the instincts were in those layers, they could be brought up when the associational layers were developed. That explained a great deal of the difficulty of those who could not accept Freudian methods. Prof. Robertson said that symbolism was graphic. The reason we employed metaphor was explained by Bolton, who said that the percepts seen by the eye were many, but the percepts received by the ear were limited to a few vowels, and perhaps one or two diphthongs, and the concepts of speech were naturally clothed in symbolism. Dr. Bedford Pierce said anæsthetics revealed what was in the memory, and that was true. It was beyond dispute—it had been proved by physiological means—that an anæsthetic produced anoxæmia of the associational centres immediately; there was by this means a stripping off, as it were, of the layers, and the elementary instincts came out—in other words, the repressed complexes.

Dr. TOM WILLIAMS said he had asked that he might be allowed to speak first of those who would reply, because of the far more important discussion on the symposium, and he thought it would be an advantage to have the reply of those who made the symposium to the criticisms which he wished to bring. In the first place, Prof. Friedländer's remark as to the rejection of Freudism was not just. There had been a criticism of Freud in America; there the Freudian doctrines were not accepted except by a few, and that was the case also in Austria and Germany. One had also to remember what had been touched on by several speakers, as to the natural antagonism to dealing with a doctrine which offended their sense of decency. Some men who later dealt with those doctrines were in the position of the reformed drunkard; no one was such a fanatical teetotaller as was the reformed drunkard, for he did what Freud called over-compensation. Other practitioners wished to be fair to the Freud doctrine, but on moral grounds refused to properly examine it. He never had had to go through that phase; to him the Freudian doctrine never appeared as obscene or filthy; he had regarded the problems as scientific ones which required to be solved. He knew of them fifteen years ago, and had been working to solve them ever since. The papers to-day, as a whole, had rather dealt with highly theoretical abstractions than with facts, and inferences from those facts. The best way, he thought, was to deal with facts and the inferences to be drawn from them. Facts were nowhere so difficult to deal with as in psychology, even in such a simple thing as a psychological reaction in a state of anæsthesia in the case of hysterical subjects. For years the profession believed there were such things as stigmata. Those stigmata were found because observers were induced to look for them, and then they found them. Babinski showed, in 1907, that they did not exist—that stigmata were only artefacts. So also in the sphere of purely mental phenomena, we were very apt to fall into that which we were taught to believe and therefore looked for. That tendency, therefore, ought to be discounted, and he asked observers to beware as to the alleged facts at the bottom of the interpretations of symbolism, though he was not doubting their existence. It must be remembered that many of the former medical doctrines, even those which everyone held, were based upon serious examination. They, the members present, did not deny to the Freudian protagonists sincerity—a sincere examination of the phenomena. Our ancestors believed in blood-letting, and for a generation people were bled to death in the firm belief that it was the proper thing to do. Their immediate

predecessors believed in antipyretics in febrile disease, and the present generation still believed in indiscriminate purgation. Still, the monstrosities of therapeutics were at last beginning to pass away. Yet, all those old beliefs were based upon a most serious examination of physical reactions, and they were much more simple than those the meeting was now considering. It had been alleged that because the theories were novel, therefore we tended conservatively to reject them. But that was not universally so; there were people who believed in the novel just because it was new. Like the Athenians, because it was new it was therefore true. Those people were to be found in America especially. In reference to the remarks made about suggestion in psycho-analysis, of course the human suggestion was implicit in every human relationship. Still, the true followers of Freud tried to eliminate that factor as much as possible. Unfortunately, many permitted themselves to fall into the error of trying to suggestionise their patient. The cures which depended upon suggestion must be considered apart. As a matter of fact, it was not the suggestion which cured the patient in most cases; the suggestion was an accidental factor; it was the process at work which cured. The meeting had been appealed to on pragmatistical grounds: because Freudism often cured patients, therefore it was the right method. That was an absurd argument. The same argument was used with regard to hypnotism, which had now been abandoned; it was used also in association with electrical methods of performing suggestion, now abandoned; and the same in regard to suggestion therapeutics, now nearly abandoned. The same argument had been used by those who practised Christian science pragmatically; they were just as powerful as were the psychologists; they probably cured more people than did the average neurologist at the present time. It was therefore necessary to inquire into the efficient factor in these reactions. What was the least-common-measure—the basic factor which was answerable for the cure in these cases? He could not enter into that now, because it was a thesis in itself. One of the fundamentals which had been dinned into their ears in America *ad nauseam*, and which had been mentioned in this discussion, was that sexual desire was turned directly into dread. But why? Not dread because it was sexual, Dr. Williams on the contrary maintained that only because the desire was regarded as illegitimate by the individual, and so he began to dread the desire. That was purely the result of induction; it was because we read into the child's mind the idea in connection with sex that it was something reprehensible, obscene. But the child's thought was not obscene. Therefore it was not the natural process which Freud and others would have us think, but a pure phenomenon of sociological induction. That was not at all universally regarded in things of sex. With regard to sublimation, the whole matter was expressed in terms which were not defined to the hearers; they were defined by Freud, and had been interpreted in their own way. It was the mere conversion of phenomena into an interest which was called "higher," but simply meant that it was more useful sociologically. It might have nothing to do with sexuality at all. To his mind it was simply that the patient, having certain feelings which might show themselves as interesting in a sexual relation, used those feelings for interest in things which were other than sexual, or at least other than reprehensible, by the psychological process of substitution, which was not a physical thing. The patient then performed an act which Freudians qualified by the mystical term "sublimation." One speaker had criticised the concept of psychological determinism. He, the speaker, did not think that could be called the doctrine of Freud: it was rather the doctrine of the French, who held it since Auguste Comte. It was the doctrine which most biologists held. Here was no more reason to discard psychological, any more than their physical, processes. All the merit which Freud endeavoured to attach to himself by virtue of determinism belonged really to Comte. With regard to the memory of what happened during birth, could they be quite sure that those things were not memories of what the child had been told about birth? There was a confusion about a memory of an experience and memory of a fact related. Again, there was an assumption in the Freudian position, that all effective social impulses were sexual. Why should they be? It was for the Freudians to prove that all effective social impulses were necessarily sexual. If one called them sexual, it was only by an extension of the use of the term "sexuality" to every possible social activity. And surely we were endowed with innumerable instincts

which had nothing to do with reproduction, or with the activities which led to it. It was not right to call the otherwise innocent relationship of two brothers, or brother and sister, child and father, child to mother, sexual. A study of the child would show that the direction of the affection of the child, whether male or female, towards, respectively, the father or the mother, was not determined by the sexual nature of the father or mother at all, but by the degree of interest and sympathetic understanding and comprehension which was brought by that particular parent towards that child—in other words, it was an induced phenomenon. As to the homosexual individual, he had studied a good many of those cases, and he had cured some. He recollected, some years ago, a diplomat who was homosexual and desired not to be, but wished to marry. It was not difficult to trace the incidence of his sexuality. It was not due to any complex towards father or mother or brother, or anybody in that way in the family, but in consequence of a very definite situation which arose in connection with military training, and the notorious homosexual practices in the army in the country from which he came. It was reduced to a kind of incident the like of which one knew a good many. The condition in him was dealt with without much difficulty, and the man was now married and well. With reference to paranoia, the same concept was brought in to interpret love turned into hate, and the whole series of apparently inconsequential conjunctions which Freud had imagined. But was it not more in line with what we knew of psychological processes to say that the paranoid was a person who began with a painful state? Whether that was induced psychologically by the causation of a painful affective attitude towards a particular situation or by a particular person, *i.e.*, by induction from without or whether by induction of a physical process from within, was not of prime consequence. In that case the patient acquired a dislike of that situation and that person, and that brought necessarily a hatred towards the author thereof, and that was fixed by habit on the one hand, or by a continuity of the somato-genetic state, and so there was a paranoid type of reaction, the third bringing in all the sexual interpretations of Freud—generally, he admitted, sexual. With regard to sadism, in the case of an individual who was sadistic in sexual relation, was not the savagery he displayed an appurtenance of the situation utilised unconsciously to excite a greater degree and intensity of pleasure—and not a pleasure sought for its own sake? There was another factor also, the desire to dominate, which was a very powerful motive in human beings—even more powerful, he thought, than the sexual motive, and one which the Freudians seemed to ignore. When the man mentioned was scolded by his father and had to go away to a male prostitute, it simply meant he had to do that in order to re-achieve his own self-assertion—a re-establishment of his power of dominance. He, the speaker, one day surprised his little son beating his chest and declaring himself the strongest man in the world, and capable of beating anybody. He asked him what the boys had been doing to him. He replied "Nothing; I am the strongest man in the world!" Inquiry revealed the fact that he had been bullied by a gang of boys, and he was proceeding to re-assert his self-respect in this way. Lynching in America had been adduced as a mark of sadism. But this mark of indignation could not be so called; it was due to a sense of outrage against the security of life and honour as expressed by the mob; there was an infraction of the law which, people felt, touched them very much, and they, in this foolish way as we thought, expressed their detestation by lynching. With regard to the phrase "I could eat her" in expression of intensity of affection, and its use as an example of the Freudian theories, could not that be better explained in the way the poets had done, namely as the desire for complete contact with the loved one, that desire that she should be merged in the lover's body? He thought it had nothing to do with the interpretation which had been placed upon it. Another factor in the love of cruelty was due to the desire for stimulation; a man would do much to get out of stagnation. The terror of solitary confinement was well known, even the feeling of isolation in a large town, and people would do much to get out of that. Cruelty was only one form of excitation in inactivity of the mind. One of Janet's patients was accustomed to pour hot water on to her foot and scald it so as to excite herself against this terrible vacuity and inactivity of life in the kitchen. With us all, the desire for excitement and to be aroused from stagnation was very powerful, and explained much in the tendency to cruelty on the part of children. With regard to masochism, he thought

that in the child there was a very powerful factor which occurred during periods of relaxation of severe exertion, during periods of illness and mild depression, and it was the need of moral sustentation and sympathy. That was a natural and legitimate thing, and was in no way connected with sexuality. It was really due, he thought, to a lowering of psychical tension, and with it came the demand for something to uplift. A feeling of security was asked for by such people, and that was obtained by the sympathy of the parent, or was gratified by some person on whom one felt one could lean. That function never left one. There were some people who had never known that feeling because their quality was one of great robustness and strength. But he thought it was illegitimate to associate the feeling with masochistic tendencies. It might be intricately with the love impulse later, and show itself as masochism, though it need not do so. He would like to offer another explanation of the case of cure of constipation by pricking with a needle. Was it not solved by the old expression in the Bible, "His bowels moved with compassion"? Did he not have compassion on the individual whom he pricked? And was not that mechanism due to relaxation of the vagal nervous supply? It was previously holding the bowel tight in vagal tonus. He suggested the cure was due to obvious compassion for the suffering of the individual. As to Jung's theory, was not "moral autonomy" another way of saying "psychic reconstruction"? It meant adaptation to life, *i.e.*, to reality and the constitution of the moral automaton. It was attempted in all the public schools in this country; it was only what was attempted in all moral discipline. It was education. It was well known that the neuroses were dis-adaptations to the social organism. With regard to phantasy, there was a tendency in children to do day-dreaming in solitude, but the antithesis to that was not necessarily a psycho-analytic exploration of the alleged sexual features of the child, but it was the education of the child so that it could learn to enjoy, to strive to "play the game," and achieve self-satisfaction, to enjoy the power of being able to do so, the spirit of *esprit de corps*. The therapist could not, by merely showing forth the mechanism which might exist in a patient—one who had left the strife of life for the realm of phantasy—restore him to a condition of social adaptation to his environment. He had to practically force the patient to do what was required, either by direct argumentation and persuasion, or by raising an incentive, or by placing the patient in an atmosphere in which it is easy to accomplish it, such as when a child was sent to school. A large part of school training and moral adaptation was due to the atmosphere of school, not to direct inculcation of knowledge by the instructors. As to cures, the process he, the speaker, had employed was one in which the essentials of re-conditioning were regarded. This re-conditioning rarely took more than fourteen days. It was an exploration which reached what appeared to be the efficiency factor in the neurosis, and there were never any relapses. He had followed out all the cases which were published as relapses.

In reply to the remarks about his address, of course emotion was the important matter, only symptomatically, in these cases; hence every effort should be made to determine the idea which caused it.

Dr. W. H. B. STODDART, in reply, said that fortunately Dr. Williams' systematic negations did not require discussion. With reference to the remarks of Sir Robert Armstrong-Jones, he (the speaker) thought the greatest astonishment was to learn that he had been psycho-analysed. Dr. Brown had suggested that Aristotle might be a greater psychologist than Freud, but perhaps in saying that he was looking upon Aristotle as philosopher and metaphysician rather than as a psychologist. He had not quite finished reading the latest of Freud's works, but Dr. Brown, who had done so, remarked that Freud stated that there were no emotions in the unconscious. That happened to be one difficulty with him (Dr. Stoddart), and he felt inclined to dissent from Freud in regard to that item. For instance, supposing a girl were in love with a man, and the man did not respond, she then repressed her love, and it was replaced in consciousness by its opposite, hate. He had had a patient of that kind. Ultimately the love came up again. Where had it been in the meantime? Freud said the emotions primarily appeared from the unconscious. But how could they come from the unconscious if there were no emotions there? Dr. Brown had pointed out that there was a certain amount of unconscious suggestion in psycho-analysis. He (the speaker) thought the use of the term "suggestion" in that sense conveyed a wrong impression. He

thought that if Dr. Brown would accept McDougall's definition of suggestion it would be better, for McDougall would say there was absolutely no suggestion in that sense whatever in psycho-analysis. It conveyed an erroneous impression to use the term in the sense Dr. Brown did before an audience hearing about analysis for the first time, for it certainly was not a method of treatment by suggestion. He had not the slightest objection to treatment by suggestion or by any other methods; cases might well be treated by other means than by psycho-analysis. He had used other methods, and did so still, successfully. All he wanted was that the means should be chosen which would best fit the case. He was on the look-out for the shortest way of getting through the work. If a patient could be cured in five to ten days, as some cases were, all well and good; but that was not analysis. In some cases one was able to use psycho-analytic knowledge and cure the patient without psycho-analysis—namely, by means of suggestion. One obtained a few associations to see what was repressed, and then by suggestion it was possible to cure. One speaker referred to the few cases of dementia præcox which had been cured. He agreed with Prof. Robertson that some of Jung's cases were not real instances of dementia præcox, though some were. Members would remember it was he (Dr. Stoddart) who in 1908 opened at the Association meeting a discussion on dementia præcox, at a date when most psychologists repudiated it, declaring that there was no such disease. In those days, as now, Sir Robert Armstrong-Jones was on the opposite side. It had now become acknowledged, and for that reason he (the speaker) could lay claim to some authority in recognising cases of dementia præcox. He was able to say that some of the cases were undoubtedly very early instances of that condition. He agreed that dementia præcox started in very early life. He had a theory of his own as to how it started, but he did not propose to communicate it to this meeting, because he knew no one would believe it. Dr. Bedford Pierce remarked that Prof. Robertson had said nothing about the effect of the influenza in the case he quoted. That, of course, was only because the meeting was engaged in the discussion of psycho-analysis, not influenza. In the organic insanities, in general paralysis, in influenzal and other toxic infectious diseases the mechanisms were the same as in the psychoses and the psycho-neuroses; it was only that the organic changes allowed the unconscious to manifest itself in distorted guise. Dr. Bedford Pierce made the objection that he thought it was unnecessary to suppose that mental processes were indestructible—that if a repression took place in one direction therefore a manifestation must take place in another. He (the speaker) admitted it was only a theory, but it was a workable one which helped to explain the observed phenomena. It was true that no one could demonstrate it by means of the manometer or any instrument of that kind; but, just as the atomic theory was a workable one which helped to explain phenomena, it was workable. No one had ever seen an atom. The idea that mental processes were indestructible had the merit that it explained most things in this domain if it did not explain everything. The way in which analysis worked was by allowing the patient to recognise a complex. The two questions of Dr. Edwards were related together. The first was as to why dreams were symbolic. The reason why items composing dreams showed a symbolic form was because if they were not symbolised they would be so objectionable to the mind that the patient would wake up. In other words, the symbolism was a protective mechanism; consciousness would not admit the real object, and it was symbolised because it was not allowed to appear in an undisguised form; therefore both dreams and symptoms were distorted into symbols. As the manifestations of a complex appeared in symbolic form, as soon as the original complex was rendered manifest to consciousness, then it could no longer appear symbolically, because it appeared in its undisguised form. Therefore it was the setting free of the complex which cured the patient. He could not now go into the mechanism of transference; by it the patient was in a way cured a second time. As had already been shown, there was as much opposition to psycho-analysis in Germany and Austria as in England, and there were adherents to it in all countries too.

Dr. WILLIAM BROWN, in reply, said there were one or two points that had emerged in the discussion which required clearing up. Freud said definitely, in his latest volume, that an emotion was not remembered; the idea of the emotion was what was remembered. Freud used the word "affect," and the affect was a discharge; it was a physical discharge, of secretory or other nature, and one got a

dissociation of that affect from the idea. More lately, as his idea of libido had become more developed, Freud used the term "libido" as a general word instead of "emotion." That was physical, rather than mental, in his system, although when one brought up this libido it came into the conscious form, and it could only show itself as an emotion, not as an intellectual idea. Yet in the unconscious it was not an emotion. Emotions, with Freud, were only present things. Ideas could be retained in the unconscious; that was a clear-cut theory of Freud's; there were a number of references to the point in his works. That brought the speaker to the question of the memory of an emotion, on which the President remarked. Dr. Menzies said that an emotion was not remembered—it was a present physical reaction. He, Dr. Brown, agreed that when, for example, he brought up an emotion or several emotions of the first two years of a person's life, the latter showed an emotion through his voice, his tone, his heart-beat, the contraction of muscles, and so on, just as in the ordinary theory of emotions, in a present physical state. The form was identical with that which it took when the person was a child two years old; it was not the form which the emotion would take if the same cause were presented in adult life. To take the simpler case of the shell-shocked soldier who had been feeling fear in the trenches and who was bowled over by shell-fire, and in whom one brought back the memory of the fear. What one brought back was the emotion which he felt in the trenches, not the emotion he would feel if the situation were identical now. If a man of thirty were put back to his second year and made to go through a certain kind of experience which involved distress, then the kind of fear he would express under hypnosis at thirty and at two years would be very different. At the age of thirty it might not arouse fear at all, or if it did, it would probably be of different kind or degree. It was very convincing as seen by the observer; the person might again talk baby language, as Dr. Edwards remarked. With great diffidence, he would like to suggest here that some of them who were interactionists—and he was one—might like to think of the emotion as stored up in the mind, as distinguished from the brain alone, and that not only our ideas but also our emotions were stored up, and could be recalled by hypnosis or other means, and be given another opportunity of stimulating the body. The other alternative to that was materialism. It seemed to him, as a metaphysician, that materialism was an impossible theory, and that was where he found it difficult to accept the views which the President put forward with regard to the structure of the cortex as determining everything. It seemed to him, the speaker, that as the soul had developed in relation to the brain, then the involution period might not be identical, or so closely similar, to the evolutionary period. The soul had retained many things in the course of its experiences in this world, which it did not lose when the body gradually disintegrated and died. There was a strong argument for this view as opposed to and distinct from materialism, and he doubted whether some doctors realised how strong those arguments were. They were brought forward by Bergson and had never been met. They were concerned with the concepts which were used in trying to understand the nature of mind—concepts which we did not apply when dealing with the physical world. Then there was the question of suggestion. He agreed with Prof. Robertson, who put it very well when he said unconscious suggestion could be more powerful than conscious suggestion. The patient put two and two together, and he, the speaker, believed that occurred in psycho-analysis. Dr. Stoddart, in his reply, did not refer to transference; he had no time to deal with it; but Dr. Williams said suggestion had nothing to do with analysis. In one sense he, Dr. Brown, agreed that it had not; analysis was different from suggestion, but psycho-analysis was not. The psycho-analytic theory of Freud was bound up with transference. Freud said that if one, by analysis, merely brought up these repressed tendencies, they would simply slip back again if the person concerned were left to himself. There were two ways in which relapse could be prevented at the moment, *i.e.*, to prevent the resistance again holding sway. One was, that the patient was at a later stage of his history, and so was stronger mentally. And there was the question of intellectualising his mind, which strengthened a different part. There was the synthetic process, and Freud said there was the most important factor, the *uebertragung*, *i.e.*, the transference of the patient's feelings towards the physician. This might take different forms—either intense love, showing itself in a declaration of love, such as occurred in the experience of every physician, or the other extreme,

intellectual interest and loyalty. Freud referred to the feelings towards father and mother. Dr. Brown doubted if the resolution of transference by analysis could be complete; if one got transference, even if one went on analysing he doubted whether one could break the link between the patient and oneself. In his own experiences he had found that link had persisted, though modified afterwards as the patient realised what it meant. That, however, was another matter. And Freud himself, in his technique, further advised, in his later papers, that those who would perform psycho-analysis should themselves be psycho-analysed by a specialist in it, and referred to this emotional relationship as an advantage. It helped, because it constituted a bond of unity and fellowship. That bond was strongly marked in those who had been psycho-analysed: they felt a great affection and loyalty to one another, and that helped to sustain their enthusiasm for the method of psycho-analysis.

Dr. C. STANFORD READ, in reply, said the meeting had been told that Freudism was full of salacious ideas. Whether they were called dirty or not did not matter, the only point which mattered was whether the statements of those who practised it and believed in it were true. It was no derogation to say the system dealt with sexual matters; it would be as sensible to throw mud at the respectable gynaecologist. Sir Robert had also criticised his (the speaker's) use of the word "ego." He was quite aware there were many egos, and especially were there variants of the social ego. He presumed his hearers in such an audience as this were conversant with Freud's works, and he used the term as Freud used it. If in reading a paper before a scientific audience it were necessary to define each term used, one could not get very far at an ordinary sitting. The superficial explanation given of how the paranoic developed did not seem very satisfactory to him (the speaker). The great charm of Freud's work was that it gave, for the first time, some insight into the meaning of the various delusions and hallucinations. He had never heard any other adequate explanation of the various delusions in paranoia or other psychoses, and he would be greatly interested if Sir Robert Armstrong-Jones or anyone else could give an alternative explanation which would be at all adequate to the known facts. Sir Robert stated he did not understand what was really meant (yet it would seem to be a simple problem) by "reality." Reality was the situation one was up against at the moment. But, instead of trying to face the problem, it might be evaded. A man might suppress it in more than one way, he might go to the club with the idea of getting away from it, or call in the aid of alcohol. Dementia præcox seemed to represent a struggle, often for a long time, with a large number of situations in the external world, to which an individual was unable to adapt himself. In his efforts he developed first certain symptoms, which represented a building-up of a world of his own, one in which he felt he could live without the perpetual struggle which the real world imposed on him. The patient could go even further, and withdraw himself from all attempts to adapt himself, and so go into the land of perpetual day-dreaming, which commanded all his energy. Wrapped up within his world in this way he became mentally inaccessible, and developed, as his main symptom, a great apathy. To him (the speaker) that conception of dementia præcox seemed most probable.

MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

THE QUARTERLY MEETING of the Association was held in the rooms of the Medical Society of London, on Thursday, November 25th, 1920, Dr. W. F. Menzies (President) in the chair.

Members present: Dr. W. F. Menzies (President), Major R. Worth (Hon. General Secretary), Drs. H. M. Baker, G. N. Bartlett, Fletcher Beach, C. H. Bond, D. Bower, A. N. Boycott, J. Chambers, R. H. Cole, M. A. Collins, A. W. Daniel, J. F. Dixon, F. Dudley, J. H. Earls, Samuel Elgee, J. W. Geddes, J. R. Gilmour, T. S. Good, H. E. Haynes, H. G. L. Haynes, R. W. D. Hewson, G. H. Johnston, J. Keay, J. R. Lord, J. McClintock, E. Mapother, C. E. Mergill, J. Middlemass, A. Miller, A. W. Neill, W. F. Nelis, N. R. Phillips, Bedford Pierce, R. W. Prentice, H. Rayner, G. M. Robertson, W. Robinson, D. Ross,

C. Rutherford, H. R. C. Rutherford, Sir G. H. Savage, J. N. Sergeant, G. E. Shuttleworth, J. G. Soutar, G. W. Smith, R. P. Smith, T. W. Smith, R. H. Steen, J. Stewart, R. Stewart, W. R. Thomas, E. W. White, C. E. C. Williams, J. L. Wilson, H. Wolseley-Lewis. *Visitor*: R. McCrae, Esq.

Members present at the Council Meeting: Drs. G. N. Bartlett, C. H. Bond, D. Bower, J. Chambers, R. H. Cole, M. A. Collins, A. W. Daniel, J. R. Gilmour, T. S. Good, J. Keay, J. R. Lord, W. F. Menzies, A. A. Miller, Bedford Pierce, G. M. Robertson, J. G. Soutar, G. W. Smith, R. H. Steen, H. Wolseley-Lewis.

Apologies for unavoidable absence were received from: Drs. R. B. Campbell, C. C. Easterbrook, G. Douglas McCrae, T. C. Mackenzie, J. B. Spence, D. G. Thomson, J. P. Westrup.

The minutes of the last meeting, having already been published in the Journal, were taken as read and duly confirmed.

BUSINESS ARISING OUT OF THE COUNCIL MEETING.

The PRESIDENT said the Educational Committee had two or three matters before them which would probably interest the meeting. A communication had been received from the Secretary of the South African Division asking for certain concessions as regards the date of the examination and the holding of bi-lingual examinations. The Educational Committee had considered the matter and made certain recommendations of a wider character to the Council. It was thought that after all, as the days of self-government were coming everywhere, it would be well for the Association to begin with the branch established in South Africa. It was thought that, rather than members there should break away from the Association altogether, the South Africa Division should be requested to conduct their own nursing examinations and report the results to the Registrar. In order to safeguard the standard, it had been decided that the examination papers set in South Africa should be published in the Journal with the home papers.

The other matter was a Danish question. Before the war Danish nurses came to this country to receive mental hospital training. National registration of nurses was compulsory in Denmark, where they insisted upon a very strict course of three years' training for this purpose. The Educational Committee recommended that such institutions as were recognised by the Registrar of the Danish National Council for training in surgical and medical nursing should be recognised by the Association, and Danish nurses so trained should be accepted for the Association's final examination after two years' mental training in this country and thus placed on the same footing in this respect as British-trained nurses.

Arising out of the Report of the Parliamentary Committee, Clause 10 of the Ministry of Health (Miscellaneous Provisions) Bill was considered. To-day it was being considered in Parliament by Committee "A." Although the Council could not do much in the matter at the present stage, they thought they ought to do what they could to obtain certain very desirable alterations. Therefore the Council sent a telegram just before this meeting to the Minister: "If amendments proposed by Medico-Psychological Association are not adopted, the Association would like Clause 10 to be withdrawn." The Council felt that this wire might, or might not, have the desired effect, but that at the least it would register the feeling and the attitude of the Association. Unfortunately it was not possible to wait until this meeting assembled before sending the telegram.

Another matter arising out of the Council meeting which it was necessary to mention to this meeting was the fixing of the date of the Annual Meeting. After consultation with the President-elect it would appear that between the 11th and the 16th of July would be the best time. It had been felt of late that the attendance of members at the annual meetings was influenced by the meetings of the British Medical Association. This was definitely so this year, when the latter Association's meeting was held at Cambridge a month before the annual gathering at Buxton. It was thought it would be well next year to try to get their own "blow in first." Perhaps Wednesday, July 13th, in London, would be agreeable.

Dr. BEDFORD PIERCE said he had not been able to attend the meetings of the Parliamentary Committee, and he did not know what were the objections to Clause 10 of the Bill which the President mentioned.

The PRESIDENT asked Dr. Wolseley-Lewis to explain.

Dr. H. WOLSELEY-LEWIS said that, as all members were aware, the consideration

of the Bill in question had been very much hurried. In these later days legislation was passed through at whirlwind rate, and it was difficult to keep pace with it. The Association, aware of the fact that two reports on this subject had been issued by it, setting out carefully what they recommended with regard to the treatment of incipient cases of mental disease. Suddenly they were met with a Bill—the Ministry of Health (Miscellaneous Provisions) Bill—which dealt with all sorts of conditions and subjects, ranging from the confines of a borough to the registration of clinical thermometers, and Clause 10 of that Bill had to do with the treatment of cases of mental disorder, incipient in character and of recent origin. That Clause, as it stood, did not carry out the suggestions which had been agreed upon by this Association. For instance it said: “Notwithstanding provisions of any Act the person shall not, if the required conditions are complied with, be liable to any penalty for receiving to board, lodging, or taking charge of for a period not exceeding six months, or such longer period not exceeding in all twelve months as may be approved by the Minister and whether for payment or not, any person suffering from mental disorder which is incipient in character and of recent origin, but not being a person who has been certified as a lunatic under the Lunacy Acts, 1890 to 1911, or in respect of whom an Order has been made under the Mental Deficiency Act 1913.” That, of course, excluded people who had previously been in an asylum. Another objectionable feature was that in Section (2), Clause (b) it said: “No such person shall be received into the institution, home or house except with his previous consent in writing and except on a certificate in writing by two duly-qualified medical practitioners to the effect that that person is reasonably likely to benefit by treatment therein.” That excluded just the people the members of this Association were anxious to benefit. If only those were to be admitted who had given their consent in writing, it would have a very limited effect, for it would exclude those recent cases who were unable to give consent and who should be treated if possible without being certified under the Lunacy Acts. There were other objectionable proposals. If it did happen that Clause 10 were passed as it now stood without certain amendments which were recommended at a special meeting of the Council, then, so far from carrying out the expressed views of the Association, on the contrary it would act adversely to them. The feeling of the Council and of the Parliamentary Committee in sending the telegram was that in the absence of some such protest it might be said that they had bestowed their blessing on the Bill.

Dr. J. GREIG SOUTAR said there was a further point which Dr. Wolseley-Lewis had not mentioned, namely, that the present mental hospitals were to be prohibited from receiving cases in the incipient stage, *i.e.*, those institutions which were specially skilled in dealing with them were, by this Bill, to be precluded from having such people. Should it not be left to the public to decide for themselves, and if they preferred to send their friends to hospitals already established, they should have the opportunity of doing so? He did not think they should be debarred from that.

OBITUARY.

The PRESIDENT regretted to have to report the death of two members: first, Dr. Thomas Graham Dickson, who was at Wye House, Buxton, for a number of years; secondly, Dr. Ant. Ritti, Secretary of the Medico-Psychological Association of Paris, and editor of the *Annales Medico-Psychologiques*, who was a Corresponding Member of this Association since 1890, and an Honorary Member since 1900.

ELECTION OF MEMBERS.

Dr. S. C. Elgee and Dr. F. Dudley acted as Scrutineers for the election of new Members. The following were voted upon *en bloc*, and were duly elected:

WALKER, JAMES, M.B., Ch.B., D.P.H. (also Gaskell Medallist and M.P.C.), Senior A.M.O., City of Cardiff Mental Hospital, Whitchurch, near Cardiff,
Proposed by Lieut.-Col. Goodall, and Drs. MacBryan and Nelis.

STALEY, MILDRED ERNESTINE, M.B., B.S.(Lond.), Rosliston, Burton-on-Trent.

Proposed by Drs. J. Francis Dickson, R. Worth, and G. Warwick Smith.

NICOL, WILLIAM DREW, M.R.C.S.(Eng.), L.R.C.P.(Lond.), A.M.O., Hanwell

Mental Hospital; House-Physician, St. Bartholomew's Hospital; Temporary Surgeon, R.N.; L.C. Mental Hospital, Hanwell, W. 7.

Proposed by Drs. A. W. Daniel, J. Tattersall, and R. Worth.

PENSON, JOHN FREDERICK, M.A., M.B., B.Ch., M.R.C.S., L.R.C.P., A.M.O., L.C. Mental Hospital, Hanwell, W. 7.

Proposed by Drs. A. W. Daniel, J. Tattersall, and R. Worth.

NOVIS, RUPERT STANLEY, M.R.C.S., L.R.C.P.(Lond.), B.Sc., "Hensol," Chorley Wood, Herts.

Proposed by Drs. C. F. Fothergill, J. Noel Sergeant, and E. D. Macnamara.

DAWSON, WILLIAM SIEGFRIED, M.A., M.B., B.Ch.(Oxon.), M.R.C.P.(Lond.), A.M.O., Hanwell Mental Hospital, Hanwell, W.

Proposed by Drs. A. W. Daniel, J. Tattersall, and R. Worth.

KEY, GORDON JAMES, M.B., Ch.B.(Aber.), Assistant Physician, Mental Hospital, Bloemfontein, O.F.S., South Africa.

Proposed by Drs. W. Russell, F. D. Crosthwaite, and Henry C. Martin.

GILLIS, KURT, M.B., Ch.B.(Edin.), Assistant Physician Mental Hospital, Bloemfontein, O.F.S., South Africa.

Proposed by Drs. William Russell, F. D. Crosthwaite, and Henry C. Martin.

MCCOWAN, PETER KNIGHT, M.B., Ch.B.(Edin.), Fifth A.M.O., Cane Hill Mental Hospital, Coulsdon, Surrey.

Proposed by Drs. S. Elgee, F. Morres, and O. P. Napier Pearn.

LILEY, GEORGE AUSTEN, M.D.(Cantab.), M.R.C.S., L.R.C.P., Fourth M.O., Cane Hill Mental Hospital, Coulsdon.

Proposed by Drs. S. Elgee, F. Morres, and O. P. Napier Pearn.

HANCOCK, ALLEN COULTER, M.R.C.S., L.R.C.P., Third A.M.O., Cane Hill Mental Hospital, Coulsdon, Surrey.

Proposed by Drs. S. Elgee, F. Morres, and O. P. Napier Pearn.

PAPER.

Dr. W. ROBINSON, M.B., Ch.B., D.P.M. (West Riding Asylum, Wakefield), read a paper on "The Future of Service Patients in Mental Hospitals" (*vide* p. 40).

The PRESIDENT said he was sure members would feel much obliged to Dr. Robinson; opinions on the paper would be very welcome.

Lieut.-Col. E. W. WHITE said that on this subject his tongue was, to a great extent, tied owing to the fact that he was the Western Command specialist on these matters, and that prevented the free ventilation of his views. He could, however, give some statistics which had a useful bearing on Dr. Robinson's thesis. Dr. Robinson had dealt with those cases which had been treated elsewhere for nine months, and were then sent to the asylum. Hence there was a large proportion of cases of general paralysis of the insane. The army could thus dispose of general paralytics when they had been definitely confirmed to be such. A certain number of them had been at the Welsh Metropolitan Hospital, and were to some extent responsible for the increased death-rate there. With regard to recruiting, the army recruiting was not done in the early war period in the way which was adopted in the later portion, for, while careful inquiry and examination into the physical health were carried out, no attention whatever was paid to the subject of the mental health, with the result that many imbeciles were accepted into the army. He could tell of some ludicrous examples he had encountered; even some idiots were in uniform, though they were soon shorn of it. As a proof of his statement he mentioned that the Lord Derby War Hospital only received Expeditionary Force patients, *i.e.*, those from overseas, and that the Welsh Metropolitan Hospital received the home service cases, largely from the labour battalions, which resulted in the recovery-rate at the Lord Derby Hospital being considerably higher than that at the Welsh Metropolitan Hospital, although the latter had, if anything, the more highly-qualified staff. There were one or two interesting facts in connection with the admissions: (1) There was a relatively large proportion of mental defectives who found their way into the army. (2) The number of cases of melancholia relatively to those with mania was large, about two and a half to one, and that was largely due to the strain of trench warfare. (3) A large number of the cases had been diagnosed as dementia præcox; many of them turned out to be confusional

insanity, a fact which was proved by their subsequent recovery. (4) There was a large proportion of cases of delusional insanity, which were the outcome of hallucinations of a persistent character and of neurasthenic exhaustion consequent upon active warfare. (5) The number of cases of alcoholic insanity was negligible. (6) The cases of true epilepsy, other than those of traumatic origin, started in this war, were exceptionally few in number.

Lieut.-Col. J. R. LORD said there was no call for secrecy concerning the conditions which were met with in the army in regard to the admission of lunatics, imbeciles, and mental defectives into it. During the war it was impossible, in the short time available, to sort out the mentally unfit from the fit in a very thorough manner. The war had to be won at all costs, and rather than be beaten, the halt, the lame, the blind, and the lunatic would have had to be impressed into the army. Neither the army nor the doctors could be blamed for what happened in this respect. Men were urgently wanted, and the doctors were constantly being impressed by their immediate superiors to bear this in mind, and they loyally did their best to meet the emergency. We were quite unprepared for war, and the accidents of recruiting were one of the best evidences of it. He took it that the object of the paper was to show that there was much misplaced sympathy with the service patient. He thought that this view was widespread among those who had to deal with this class of patients, though he had not himself had any experience of them. The general public seemed to have the idea that all war-mental cases should be considered on absolutely the same lines as those who had been incapacitated by wounds, etc. No doubt there were many so deserving, but the paper they had heard did not show that they were in the mental hospitals as service patients. The October number of the Journal published the report of the mental division of the Welsh Metropolitan Hospital during the war. There the home service men numbered one to fifteen; on foreign service at the asylums the proportion was one to three. This supported the view that actual warfare was not a prominent ætiological factor in the service class of patients. Late in the war these problems gave some of us now present a good deal of cause for thought. It seemed clear that it was impossible to make a broad statement to the effect that the soldiers in question would have become insane if there had been no war, *i.e.*, if they had not entered the army. It was impossible to dogmatise on these lines, for our knowledge on the ætiology of insanity was not sufficiently definite. If one took 100 from the sane population, or 100 soldiers who survived mentally, and inquired into their family and personal history, with the same intensity as Dr. Robinson had done with regard to service patients, who can say that the results would not be found very like those now presented relating to the soldiers who ultimately had to be cared for in the mental hospitals? The insane soldier was given the benefit of the doubt, and he agreed that this was the only fair decision. He regarded the paper as a very useful one; obviously it had been drawn up with the greatest care, and every conclusion at which Dr. Robinson had arrived was ably supported by the figures he produced. It was rather a pity the number of cases inquired into was not greater than 140—rather too few for generalisation—but the work had been excellently well done.

Dr. GOOD (Oxford) said he felt much interested in Dr. Robinson's paper, and he would like to congratulate him upon it. The point that struck him was that every one of the cases spoken of was organic, *i.e.*, apparently only organic cases as service patients were admitted to that asylum. In each case there was either mental deficiency, alcohol, or syphilis, *i.e.*, there was either a congenital organic basis or the result of some toxin. Apparently there were no instances of the more acute psychoses. Adolescent insanity was mentioned, but it was not stated whether all those adolescent cases, which might be spoken of as dementia præcox, were associated with feeble-mindedness, or whether they included cases which showed no feeble-mindedness. During the war he dealt with so-called cases of shell-shock and mental trouble, and his experience led him to say there were two classes of adolescents. In one of these one could, by a simple point-scale test, find intellectual deficiency. In the other form there was simply an emotional fixation, and there was much difference in the results of treatment of these two kinds, the emotional fixation being treatable by psycho-therapy. The author of the paper classed his cases under the heads of amentia and dementia. Dr. Good did not know whether Dr. Robinson held the views of Tanzi, and included cases

of acute confusion in his ailments. He quite agreed there was a tendency to give undue sympathy to the class of case under review, and to attribute them to the strain of war on insufficient evidence, and this was a point on which he would like to hear the views of his colleagues. In the early part of the war he (the speaker) was running a fairly large section for neurasthenic and mental cases (he used the word neurasthenic as denoting only an earlier stage of mental disorder), and it was found that many of these cases recovered under treatment. As the war went on it was found that the cases remaining were of the class that Dr. Robinson had mentioned. Was it not, therefore, a fact that the cases due to the emotional strain of the war had been cured by his colleagues working at the Lord Derby, Cardiff, and other Hospitals? If so, that left only the chronic residual cases which were not due to the war but to congenital defect or toxins. At present he was in the position of having to run a Ministry of Pensions hospital for neurasthenic and shell-shock cases, and the great problem was how to treat and deal with the number of feeble-minded and toxic cases who at present did not seem to benefit by psycho-therapy (either psycho-analysis, suggestion or hypnotism). Apparently in the earlier part of the war many cases were improved as there was no organic disability; he was not now speaking only of the hospital with which he was connected. They had two forms of cases—one which had an organic basis and the other, perhaps, a psychic basis. The latter class they had been able to do something with, but at present their knowledge as to how to treat the organic cases did not seem to have advanced. He agreed with what Col. Lord said about recruiting. For a time he was examining recruits in the area in which he resided, and in the earlier stage of the war many feeble-minded and organic cases were excluded, but later, when there was greater pressure for men, many of these cases were taken into the army. The shortness of men for the war was the reason for many of those admissions which were now criticised. He did not say there should be a cessation of attempts to cure the long-standing cases, but perhaps too much emphasis had been laid on the number of these, and he thought the members of our specialty at the War Mental Hospitals were rather to be congratulated in their treatment of the recent cases, which treatment had prevented them swelling the number of chronics.

Dr. HUBERT BOND said he had listened to Dr. Robinson's paper with close interest, and wished to congratulate him upon it. But he could not feel quite sure whether the author wished the meeting to conclude that a number of ex-soldiers had been adjudicated as service patients either erroneously or too generously, or in consequence of a misplaced sympathy. He hoped such a view would not go forward as a true reflex of the views held by those at this meeting. The problem, as everyone knew who had anything to do with the task, even in the most humble capacity, was a very difficult one; and though he would not question the statistics which had been presented—he did not doubt that great care had been taken to make them accurate—yet those figures left him (the speaker) quite cold. He cared but little for figures on heredity, etc., when one was face to face with having to vote or not to vote advantages to a man as a result of certain circumstances, in this case as the result of the war. Nor did it appeal to him, as part of the question whether the man's services were overseas or not. The point surely was that these men were efficient citizens up to the time of the war. Then the war came. Some volunteered for service, some were ordered into the army under the Military Service Act. If mental disease broke out in that service people had no right, especially in view of the limitation of knowledge on these matters, to place in the scale against the man figures on heredity and other speculative matters. And as a member of a committee which was called together to create a kind of formula for the guidance of naval and military officers in adjudicating upon eligibility to be classed as service patients, he could say that committee was a very representative one embracing various interests; and after prolonged thought and discussion a useful and workable formula was passed. He thought it would be found to be in practice not only the only conclusion that committee could have come to, it was the only conclusion which any similar number of men from this specialty would have come to. Before resuming his seat he wished to utter a friendly word of protest against the use of the expression—which he had heard twice or thrice that day—to the effect that when the patient was considered to be irrecoverable he was sent to an asylum. Its use tended to bring about a feeling that only irrecoverable people went to asylums or should do so. That, of course,

was not the truth at all. The real truth was that persons are often reluctant to send their relatives to asylums because (1) owing to the law they would necessarily have had to be paupers for the time being; (2) they would have had to be certified. The first reason was obviated *re pensioners*. That so many irrecoverable pensioners were sent to asylums was merely the effect of the decision to treat insane soldiers in hospitals under military control for a sufficient time to enable probable or possible recovery to take place without the patient being certified.

The PRESIDENT said the time was approaching when the Association must take up the question of the future of these service cases, and it was his hope that Dr. Robinson would have said something on that. Nearly all these cases were graded in military hospitals, sometimes by neurologists, but more often by young captains; they were all graded as having been due to the war, cases of epilepsy, and so on. The cases of alleged epilepsy were really hystero-epilepsy. They had been graded as "attributable to the war, 100 *per cent.*" And the irrecoverable residue, as Dr. Robinson said, were aments or dements; they came into the asylums and got 100 *per cent.*, whereas the man who had lost an arm, or leg, or a right hand, got 70 *per cent.* The man who had had his brain half blown away got less because he could do some work. That seemed to be wrong and unkind. This condition of affairs would go on for twenty or thirty years, in some degree—some of these epileptics would live thirty-five years. The country would have to settle down to pensions for a long time. He did not refer only to the cases which came into asylums as service patients. Those would come before the Pensions Boards, and he thought they should be cut down; some he would cut down from 100 to 30 *per cent.* It paid the friends to take these service patients out, in order that they might live on the proceeds of these pensions, and as soon as the patient was brought away from the institution he had to appear before a Board. In his district he cut them down to 30 *per cent.* and the relatives saw it did not pay to keep them at home. Those fit to be removed were taken out long ago. Those now in were hopeless imbeciles, or primary dements, and the Association would have to consider the ultimate future of these mental war cases. He hoped that next year some member would volunteer to read a paper, with recommendations, so that a discussion could take place as to what was ultimately to become of these cases, and whether the country should go on paying, for an illimitable period, the 100 *per cent.* The Association was obliged for the paper.

Dr. J. STEWART thought Dr. Bond's excellent closing remarks emphasised the importance of using terms very carefully. He was himself disappointed to see on to-day's agenda the announcement that Dr. Robinson was connected with an "asylum." Dr. Bond said that when cases were sent to the county mental hospitals they were relegated to them as places to which irrecoverable patients should be sent. He, the speaker, thought this Association should use every opportunity to let the public understand that the county institutions for the treatment of the insane were not merely places for mental derelicts, but were places for the treatment of people who were insane. For that reason the term "mental hospital" was far preferable to "asylum."

Dr. ROBINSON, replying on the discussion, said two or three of the points raised appealed to him. With regard to the question of general paralysis, two out of every five had it when admitted, three out of five developed it since they were admitted. In regard to the recoveries from mental hospitals, it seemed to him that a certain number of cases which had been discharged as recovered from mental institutions came back into asylums. He could not give exact figures, but he had admitted many patients who had been discharged recovered from the Lord Derby War Hospital, that being the one from which his asylum received most of its service patients. With regard to insanity and adolescence, he agreed there were two types. One was mentally deficient and at adolescence showed signs of mental confusion; the other belonged to the well-recognised type of adolescent insanity. He employed the term "amentia" to indicate developmental defect, "dementia" as applied to acquired defect. He was accustomed to the methods used in the classification of service patients in regard to asylums, and he believed that greater efficiency had recently resulted from the methods which had been adopted.

SOUTH-EASTERN DIVISION.

THE AUTUMN MEETING of the South-Eastern Division was held by the courtesy of the Committee of the Hospital and Dr. Fuller, the Medical Superintendent, at the Three Counties Mental Hospital, Arlesey, Bedfordshire, on Thursday, October 14th, 1920.

Present: Drs. M. A. Archdale, C. W. Bower, D. Bower, A. N. Boycott, J. Chambers, R. H. Cole, J. F. Dixon, C. F. Fothergill, L. O. Fuller, H. E. Haynes, D. Hunter, H. A. Layton, W. F. Menzies, J. Stewart, R. J. Stilwell, C. M. Tuke, and J. Noel Sergeant (Hon. Divisional Secretary).

Expressions of regret at inability to be present were received from Sir Marriott Cooke, Sir Geo. H. Savage, Drs. M. R. Barkas, G. N. Bartlett, W. Bevan-Lewis, W. F. Blandford, A. Bowles, A. H. A. Boyle, C. Caldecott, M. A. Collins, W. E. Collier, W. R. Dawson, H. Devine, F. Dillon, F. H. Edwards, F. A. Elkins, J. T. Fox, G. Gordon, H. E. Haynes, W. D. Higson, R. A. Hooper, H. A. Kidd, W. S. T. Kimber, R. Langdon Down, J. R. Lord, G. D. McRae, T. W. Mills, J. N. G. Nolan, J. G. Porter Phillips, R. G. Rows, W. F. Samuels, J. C. Shaw, G. E. Shuttleworth, R. Percy Smith, A. I. de Steiger, H. F. Stilwell, F. R. P. Taylor, D. G. Thomson, J. Turner, H. Walford, C. Williams, J. C. Woods, and M. B. Wright.

The members journeying by train were met by the Hospital 'buses, and on arrival taken round the male side of the Hospital.

At 1.15 p.m. the members were entertained to luncheon, at which Dr. Fuller took the chair.

The toast of "The King" was proposed by the CHAIRMAN.

Dr. MENZIES proposed the toast of "Our Hosts," coupling with it the names of the Chairman of the Committee of the Three Counties Mental Hospital and Dr. Fuller.

Dr. FULLER responded.

The members were then taken round the female side of the Hospital, the store rooms, kitchens, laundries, cheese-making department, farmery, water-softening plant and the chapel.

At the meeting of the Divisional Committee of Management—present: Drs. Bower, Sergeant and Tuke it was decided, in conformity with the wishes of the President, Treasurer and the Parliamentary Secretary, to arrange to hold the meeting of the South-Eastern Division in conjunction with the meeting of the Parliamentary Committee.

The General Meeting was held at 3.30 p.m., in conjunction with the meeting of the Parliamentary Committee of the Medico-Psychological Association.

Dr. Menzies took the chair.

The minutes of the last meeting were taken as read and confirmed.

The date and place of the Spring Meeting was left to the Hon. Divisional Secretary to arrange.

The meeting then became a meeting of the Parliamentary Committee, at which the members of the South-Eastern Division were present, and took part in the discussion on the Ministry of Health Bill, but at which the members of the South-Eastern Division, other than those who were members of the Parliamentary Committee, were not allowed to vote.

At the conclusion of the meeting the members were entertained to tea by Mrs. Fuller, after which the Hospital 'buses carried the members back to the station, so concluding an extremely instructive and agreeable day.

SOUTH-WESTERN DIVISION.

THE AUTUMN MEETING of the above Division was held, by the courtesy of Dr. Good, at Ashhurst Hospital, Littlemore, near Oxford, on Friday, October 29th, 1920.

The following members were present: Drs. Good, Neill, Lavers, McWilliam, Nelis, Soutar, Townsend, and Bartlett (Hon. Divisional Secretary).

During the morning cases of great interest were shown by Drs. Good, Davies Jones, MacPhail, Eaglestone, and Green, and the relaxation method of hypnosis demonstrated.

Dr. Soutar was voted to the chair, and the minutes of the last meeting were confirmed.

Letters of regret for non-attendance were received from Drs. MacDonald, Devine, M. Martin, Cole, Starkey, Prentice, Lord, Eager, MacBryan, Stanford-Read, Hughes, and B. Mules.

Dr. Bartlett was nominated as Hon. Divisional Secretary.

Drs. Good and Soutar were nominated representative members of Council.

The place of the Spring Meeting, 1921, was left in the hands of the Secretary.

Dr. DAVIES JONES gave the details of an analysis illustrating the action of a particularly gruesome trauma on a youth, originally hetero-sexual, and the later development of homo-sexual tendencies.

Drs. SOUTAR, GOOD, LAVERS and MACPHAIL discussed the findings and the adjustment, and Dr. DAVIES JONES, in his reply, proved a strong supporter of Freud's teaching.

Dr. GOOD compared the Binet-Simon tests and Dr. Evan's point-scale intelligence tests, upholding the greater value of the latter for practical purposes, both as the easier method of accurately ascertaining a degree of feeble-mindedness, and as a means of providing material useful later as the groundwork for analysis. Dr. Good proceeded to illustrate the advantages of analysis in moral delinquents, specifying the beneficial results obtained in a child who was a persistent thief.

Drs. SOUTAR and LAVERS joined in the ensuing discussion.

A hearty vote of thanks was accorded to Dr. Good for his kindness and hospitality.

NORTHERN AND MIDLAND DIVISION.

THE AUTUMN MEETING of the Northern and Midland Division was held by the courtesy of Dr. David Hunter at the "Coppice," Nottingham, on Thursday, October 21st, 1920. Dr. David Hunter presided.

The following nineteen members were present: Drs. T. S. Adair, J. Bain, J. F. Dixon, A. J. Eades, A. Ewan, D. Hunter, T. L. Johnston, W. S. Kay, H. J. Mackenzie, G. E. Mould, B. Pierce, E. Powell, M. L. Rowan, E. S. Simpson, T. W. Smith, R. C. Stewart, W. Rees-Thomas, W. Vincent, J. R. Gilmour, and two visitors, Rev. A. Thornley and Mr. J. W. Carr. Regrets at inability to attend were received from many members.

Dr. David Hunter, in extending a hearty welcome to the Division on the occasion of their first visit to the "Coppice," gave a few particulars as to the origin of the Hospital.

The foundation dated back to 1788, when a Voluntary Subscribers' Committee was formed, principally among the Governors of the Nottingham General Hospital, to raise funds for the provision of a hospital for the insane, which was up to then lacking in the county.

This Committee first formed a union with the town and county magistrates and opened a general asylum at Sneinton in 1812, to accommodate both pauper and private patients in separate divisions. One of the physicians to this asylum was Dr. Andrew Blake, the first chairman of the Medico-Psychological Association. In 1855 the voluntary subscribers dissolved their partnership with the magistrates and built the present hospital for private patients only. It was formally opened in 1859, when the first Medical Superintendent, Dr. W. B. Tate, was appointed. He remained in office for fifty-four years, dying in harness at the age of 85. The object of the foundation was a charitable one, and ever since the opening a large percentage of the patients were received at rates below the cost of maintenance.

(1) The minutes of the last meeting were read and confirmed.

(2) A ballot was taken for Edward Palmer Harding, L.R.C.P.&S(I.), Assistant Medical Officer, East Riding Mental Hospital, Beverley (proposed by Drs. Simpson, Kirwan and Gilmour), as an ordinary member of the Association and he was unanimously elected.

(3) Drs. B. Pierce, G. E. Mould and T. Stewart Adair were unanimously elected to form the Divisional Committee for the next twelve months.

(4) Dr. E. P. S. GANE then read a paper entitled "A Plea for the Chronic Insane." Dealing wholly with the public asylum service, Dr. Gane pointed out that in the elaboration of new classifications, methods of diagnosis and systems of treatment, there was a danger that the claims of the chronic insane might be overlooked. He reviewed the present conditions, and considered that the two factors which told against recovery were the deadly monotony and the absence of hope. The willing patient had in most cases to be content with work as its own reward. Too few items of the daily routine gave pleasure at the moment, or a prospect of a happier state in the future. He divided the chronic insane into three groups: (1) The willing and useful worker; (2) the occasional worker, where combination was necessary to result in any economic value; (3) all those who from mental, moral or physical debility were incapable of useful occupation. In the first class he recommended separate housing, where there would be less restraint, more varied and abundant food, and a day a week of leave, to be used as they pleased, consistent with their *parole*, and the giving of small sums of pocket-money. He hoped that in this way the first class would benefit and that the two lower classes would move up, resulting in a higher standard of comfort and efficiency.

A full and interesting discussion followed, in which the following members took part: Drs. Hunter, Powe'll, Pierce, Stewart, Dixon, Vincent, Thomas, Ewan, Eades and Adair. The chief points brought out in the discussion were: First, that in many of the asylums increased leave was being given to suitable patients to go out, with the consent of their relatives, either for the day or for longer periods as arranged; this practice seemed to be fairly general and to lead to greater content. Second, that money rewards had been adopted with success in several asylums. Third, that the diminution of the number of attendants on chronic cases lessened the feeling of restraint and had been of benefit.

Dr. Gane, who was cordially thanked for his paper, replied.

(5) Dr. BEDFORD PIERCE then gave a short account of the meeting of the General Nursing Council and reported informally their resolutions.

This brought to a close a very successful meeting.

SCOTTISH DIVISION.

A MEETING of the Scottish Division of the Medico-Psychological Association was held in the Royal College of Physicians, Queen Street, Edinburgh, on Friday, November 19th, 1920.

Present: Drs. Bruce, Buchanan, Dods Brown, Bryce, Easterbrook, Henderson, Hotchkis, Keay, Kerr, Macphail, McRae, Macdonald, Mackenzie, Tuach Mackenzie, Orr, G. M. Robertson, Shaw, Skeen, Taylor, Yellowlees, and R. B. Campbell (Divisional Secretary).

Dr. Easterbrook occupied the chair.

The minutes of last Divisional Meeting were read and approved, and the Chairman was authorised to sign them.

The SECRETARY reported on various matters arising out of the minutes.

Before taking up the business of the meeting the Chairman referred in sympathetic terms to the serious illness of Dr. Maxwell Ross, and his resignation from the Medical Superintendentship of Murray's Royal Asylum, Perth, to which he had been only recently appointed. It was unanimously resolved to ask the Secretary to convey the sympathies of the members present to Dr. Maxwell Ross.

The SECRETARY intimated apologies for absence from Drs. D. Yellowlees, D. G. Thomson, Bower, Parker, Carre, Fraser, Steele, Ross, Leggat, Chislett and Crichlow.

Dr. R. B. CAMPBELL intimated his resignation from the Secretaryship of the Division. His resignation was accepted with regret, and he was thanked for acting as Divisional Secretary for the past ten years.

Dr. CAMPBELL stated that Dr. W. M. Buchanan was willing to take over the secretarial duties, and he was unanimously elected Divisional Secretary.

The Business Committee was appointed, consisting of the nominated member, the two representative members of Council, along with Dr. Campbell, Dr. D. K. Henderson and the Divisional Secretary.

Drs. J. H. MacDonald and C. J. Shaw were nominated by the Division for the position of Representative Members of Council, and Dr. W. M. Buchanan was nominated for the position of Divisional Secretary.

The following candidate after ballot was admitted to membership of the Association:

Jessie Brown McLachlan, M.B., Ch.B.Glasg., D.P.H.Camb., Assistant Medical Officer, Stirling District Asylum, Larbert.

The SECRETARY submitted a letter which he had received from the Secretary of the Parliamentary Committee of the Association stating that a small sub-committee had been appointed to consider amendments to the Asylums Officers' Superannuation Act, in view of the likelihood of an amending Bill being brought forward at an early date, and that it was desirable that the Scottish Division should consider the matter and suggest any amendments which were considered desirable.

After very full discussion of the provisions contained in the Act the following amendments were unanimously agreed upon:

(1) *Proposed by Dr. G. M. ROBERTSON and seconded by Dr. DODS BROWN*: "That the Royal Asylums of Scotland—which are entitled 'Public Asylums' in the Scottish Lunacy Acts—which perform public services analogous to those of District Asylums, and all of which either now or formerly discharged the functions of District Asylums by caring for parochial patients, should come under the provisions of the Asylums Officers' Superannuation Act."

(2) *Proposed by Dr. G. M. ROBERTSON and seconded by Dr. T. C. MACKENZIE*: "When any officer or servant leaves the service of a District Asylum, and enters that of a 'Public Asylum' (Royal Asylum), which is a public service dealing with the care of the insane, any rights toward a pension which he has acquired in the service of the District Asylum should continue to exist, and when he retires from the service of the 'Public Asylum' (Royal Asylum), after attaining the necessary age, and having served the necessary length of time, as required by the Asylums Officers' Superannuation Act, he should on retirement receive as a pension the sum of money he would have been entitled to for the number of years he had actually served in the District Asylum, had his whole length of service been completed in District Asylums."

(3) *Proposed by Dr. G. M. ROBERTSON and seconded by Dr. CAMPBELL*: "When an officer or servant leaves a 'Public Asylum' (Royal Asylum), and enters the service of a District Asylum, the number of years he has served in the 'Public Asylum' (Royal Asylum) should count towards the number of years of service entitling him to a pension, in the same manner as attendants in the lunatic wards of poorhouses, on transferring their service to District Asylums, are entitled to count their years of service in the poorhouse toward their pension."

Note.—It has been pointed out that hardships and anomalies exist in Scotland by the exclusion of these Asylums from the Superannuation Act. An exhaustive inquiry has been made into the subject by a Committee of the Royal Asylums, and their inclusion under the Superannuation Act is approved of by the General Board of Control.

If No. 1 Amendment be acted on, Nos. 2 and 3 are not necessary.

(4) *Proposed by Dr. G. M. ROBERTSON and seconded by Dr. BRUCE*: "When a medical officer leaves the service of a District Asylum (or of a 'Public Asylum' [Royal Asylum], should these Asylums come under the Superannuation Act), to become a Commissioner or Deputy Commissioner of the Board of Control, seeing that he is still engaged in a public service dealing with the care of the insane, any pension rights which he has acquired by his previous service in the District Asylum (or 'Public Asylum') should continue to exist, and the proportionate sum due should be paid towards his pension, when he retires, on attaining the required age, and on having served the number of years necessary for a pension under the Asylums Officers' Superannuation Act."

(5) *Proposed by Dr. BRUCE and seconded by Dr. CAMPBELL*: "Section 6 should be amended so that the whole time served in the Asylum Service should count as pensionable service, whether these services have been continuous or not, and whether they have been rendered at one or more Asylums, and such pensionable service should not be restricted as at present to periods of service of two years or more."

(6) *Proposed by Dr. BRUCE and seconded by Dr. CAMPBELL*: "Section 16

should be amended so that the salary or wages and emoluments of an established officer or servant shall for the purpose of computing the amount of a superannuation allowance or gratuity be calculated according to the average amount of his salary or wages and emoluments during the last *five years* of his service, instead of *ten years*, as according to the present Act."

(7) *Proposed by* Dr. BRUCE *and seconded by* Dr. CAMPBELL: "In the event of an established officer or servant having served twenty years or more in the asylum service, and having to resign his appointment in the asylum service for compassionate grounds before reaching his pensionable age, he should be eligible for pension on reaching the required pensionable age, although not at the time in the service of the Asylum."

(8) *Proposed by* Dr. MACDONALD *and seconded by* Dr. T. C. MACKENZIE: "That any period or periods of service spent in any institution for the care and treatment of the insane prior to the passing of the Asylums Officers' Superannuation Act (1909), should be added to any subsequent period counting for pension in any institution coming within the provisions of the Asylums Officers' Superannuation Act."

(9) *Proposed by* Dr. McRAE *and seconded by* Dr. SKEEN: "In the case of an established officer or servant dying while in the service of an Asylum, an annual allowance or an annuity should be paid to the widow and children or dependants of the officer or servant."

Dr. Easterbrook had to leave the meeting at this point, and Dr. G. M. Robertson took the chair.

Dr. W. H. BRYCE read an interesting and instructive paper on "Some Considerations in Psychotherapy," which was followed by a discussion in which several members took part.

A vote of thanks to the Chairman for presiding terminated the business of the meeting.

A dinner, after the meeting, was held in Messrs. Ferguson and Forrester's, and was well attended.

IRISH DIVISION.

THE AUTUMN MEETING of the Irish Division was held on November 4th, 1920, at the Royal College of Physicians, Kildare Street, Dublin.

Members present: Lieut.-Col. W. R. Dawson (in the Chair), Drs. J. Mills, P. J. Irwin, F. E. Rainsford, H. M. Eustace, H. R. C. Rutherford, W. S. Smyth, and R. R. Leeper (Hon. Divisional Secretary).

Letters of apology for unavoidable absence were read from Dr. M. J. Nolan (Downpatrick), and Dr. J. M. Colles, K.C.

The minutes of the previous meeting were read and confirmed.

The meeting next proceeded to consider the report of the Irish Public Health Council, and discussed in detail the relevant portions of the report.

As the meeting was not large it was decided to reconsider the report at the Spring Meeting, and the following notice of motion was handed in by Drs. RAINSFORD and MILLS and ordered to be sent to all the members of the Division as part of the agenda for the Spring Meeting of the Irish Division:

(1) "That the Members of the Irish Branch of the Medico-Psychological Association, on consideration of the report of the Irish Public Health Council, are strongly of opinion that in the matter of the organisation of the Ministry the alternative proposal (B) would be in every way the more suitable from considerations of efficiency, economy, and administration."

(2) "That they approve generally of the establishment of Health Councils for each county in Ireland."

(3) "That they approve of the establishment of a State Medical Service, centrally appointed and centrally controlled, which service will include Lunacy Administration."

(4) "That, as regards cost of maintenance of asylums, they are of opinion that the State should bear half the cost of maintenance, as is proposed in the case of the other Public Health and Medical Services."

Clause 10 of the recently introduced "Ministry of Health (Miscellaneous Provisions) Bill" was then considered by the meeting, as it is understood that this

Bill is to extend to Ireland. After some discussion, not all of a favourable character as regards the principle of the clause, it was proposed by Dr. RAINSFORD, seconded by Dr. LEEPER, and passed:

"That, with reference to the Ministry of Health (Miscellaneous Provisions) Bill, as the Irish Division of the Medico-Psychological Association understand that Clause 10 is likely to be made applicable to Ireland, they are of opinion that the proviso 'that this Clause shall not apply to a person who has been certified as a lunatic under the Lunacy Acts' should be deleted."

The Hon. Secretary was directed to forward, at once, a copy of the resolution to the Hon. Secretary, Parliamentary Committee of the Association, and to request his attention to the matter of the resolution.

Dr. RAINSFORD read an interesting communication entitled "Note on a Case of Pellagra" (see p. 48), which was discussed by the members present.

The CHAIRMAN thanked Dr. Rainsford for the very interesting case he had so fully reported, and remarked that, owing to its rarity, the members were possibly unable to discuss the case as fully as it deserved.

This terminated the proceedings.

PARLIAMENTARY NEWS.

HOUSE OF COMMONS.

October 25th, 1920: Soldiers unidentified in mental hospitals.—Mr. WATERSON asked the Secretary for War how many soldiers remained unidentified in mental hospitals, and what steps were being taken to make the general public aware of the facts so as to secure identification.—Mr. CHURCHILL replied: There is no unidentified soldier in the mental hospitals under the control of the War Office, and so far as the Department is aware there is no unidentified soldier in any other mental hospital.

Maintenance of pauper lunatics.—Mr. R. YOUNG asked the Minister of Health what was the cost per patient repaid to boards of guardians for lunatic patients in county asylums; whether, owing to the increased cost in such asylums for lunatic patients there was a growing tendency to retain these mental cases in workhouses; and whether he would consider that an increase in the grants repaid to boards of guardians should be given to secure the removal of mental patients to suitable hospitals where more highly skilled treatment could be obtained.—Dr. ADDISON replied: The grant payable to a board of guardians in respect of a lunatic in a county asylum is 4s. weekly. I have been unable to find any evidence of the tendency suggested and I do not think that an increase of the grant is called for on this ground.—Mr. FORESTIER-WALKER asked the Minister of Health whether, in view of the greatly increased cost of maintenance of pauper lunatics, he was prepared to introduce legislation amending the Act of 1888, so as to provide repayment to boards of guardians of a contribution proportionate to the present high cost of maintenance and also towards the large increase of salaries and bonuses of the officials of Poor-law unions.—Dr. ADDISON replied: As I have repeatedly stated, in view of the contemplated legislation for the reform of the Poor-law, it would not be practicable to deal with these particular points at the present time.

November 3rd: Treatment of loss of memory cases.—Mr. AUBREY HERBERT asked the Secretary for War whether ex-service men who from shell-shock or some other cause had lost their memory during the war would be provided with suitable accommodation in homes and not in lunatic asylums.—Major TRYON (Parliamentary Secretary to the Ministry of Pensions) replied: Special accommodation is provided by my Department for any ex-service man suffering from loss of memory due to his service in the late war, but should the malady unfortunately develop into certifiable insanity the patient can no longer be detained in a Ministry institution, but must be transferred, in accordance with the present Lunacy Laws, to the care of the Board of Control.

Maintenance of pauper lunatics.—Lieut.-Comdr. HILTON YOUNG asked the Minister of Health whether, in attempting an equitable readjustment of existing Government subventions in relief of rates, he would take into consideration the

inadequacy of the 4s. allowance in respect of the maintenance of pauper lunatics. —Dr. ADDISON replied: Yes, sir.

November 4th: Ministry of Health Bill (Abstract, re Clause 10).—Dr. ADDISON having outlined the proposals of the Bill with respect to housing the right honourable gentleman went on to deal with Clause 10. During the war, he said, they found a large number of men suffering from shell-shock and similar affections became mentally disordered for a short time. A system was set up whereby suitable cases had treatment in mental hospitals. In Clause 10 provision was made for the continuance of this form of treatment under very stringent safeguards. It was vital that this class of men should escape the stigma and disabilities of being classed as lunatics. In the first place the clause provided that the persons so treated must be suffering from mental disorder which was incipient in character and of recent origin. The next thing it did was to limit the treatment in any individual case to six months. Safeguards were necessary, as it would clearly stultify the whole effort if any irregularities occurred. The places where persons were to be treated were to be certified, examined and visited. Persons could only receive treatment on the certificate of two duly qualified medical practitioners; they could only be received on their own consent; and they could discharge themselves at any time by giving notice in writing. The scheme did not apply only to ex-service men. They did not anticipate that it would require more than the existing staff.

Mr. RENDALL: Does this clause mean that the right honourable gentleman does not propose to ask for the assistance of the Lunacy Commissioners in inspecting these places?

Dr. ADDISON said he did not say that. It might be done with some of their staff or assistants, but at the present time he saw no reason to add to the staff.

Earl WINTERTON, in moving the rejection of the measure, said that his first objection to the Bill was that it dealt with half a dozen different subjects. It dealt with the question of lunacy and proposed most formidable changes in the existing law, while it removed one of the principal safeguards which the subject now had under the Lunacy Laws. It also proposed much more wide and sweeping changes than the right honourable gentleman would admit in the relations of local authorities to voluntary hospitals. He thought that Clause 10, which dealt with treatment for incipient mental disorder, would prove one of the most contentious and controversial clauses in the Bill. Under Section 315 of the present Lunacy Act a penalty was imposed upon anyone detaining a mental case for profit without complying with the necessary procedure of judicial investigation prescribed for the protection of the individual. Under Clause 10 of this Bill all that safeguard was swept away, and the Minister was given practically *carte blanche* to override the Lunacy Act. He did not know why the Ministry of Health should override the Lunacy Commissioners. Personally, he did not think that its attempts to deal with other questions and to deal with other reforms would lead them to believe that it would be any more successful in this. Many people who had studied the question held the view that even the Lunacy Acts were not sufficiently strong to protect the subject from possible mishandling or ill-treatment at the hands of those, whether relatives or doctors, who might be ill-disposed towards him. What made this Bill all the more dangerous was that under the Lunacy Acts only a certified person could be detained or treated as a lunatic, whereas under this clause it would be possible with very small safeguards for, say, a neurasthenic, who was not familiar with the law, to be incarcerated without any appeal. Many authorities who had taken a life-long interest in the treatment of these unfortunate people afflicted with mental delusions objected strongly to the clause as it stood, and they had supplied him with a memorandum in which they urged that what was needed was not such institutions as were proposed by the Bill, but the provision of cheerful hospitals run on a purely hospital footing, not for profit, but philanthropically and without detention.

Sir H. CRAIK, in seconding the motion for rejection, said he agreed with Lord Winterton and with his medical friends with respect to the importance of the medical provisions of the Bill, but surely a subject of this sort involving points of great importance to the individuals and points of delicacy on which the house had to be advised by the most mature and careful medical authority could not be dealt with in a few lines of one clause. Yet, in effect they were told that if they did not take it as a small, almost infinitesimally minute portion of one Bill they were

opposing the whole matter and refusing to move forward. That was an unjust argument, and led to the destruction of all sound Parliamentary proceedings. Even the worm must turn, and this was a Bill which, looking to his past when he helped Mr. Bonar Law in opposing similar socialistic projects, he could not now support. It increased unduly the power of the bureaucracy, fettered unduly their freedom of action, was contrary to the whole genius of our people, and launched the country into an expenditure of a ruinous character.

Sir DONALD MACLEAN said he hoped that the House would not give in anything like their entirety the powers asked for by the Ministry in Clause 10. Those powers ought to be limited specifically. It was a very serious inroad on what had hitherto been very carefully safeguarded by that House. People knew what had happened under the safeguards of the certificates of two medical men, and all the rest of it. Any handling of this subject by a Government or other department by way of extension of existing powers ought to be most carefully examined before any extension of powers was granted. The horror of sending men into lunatic asylums or mental hospitals often did the greatest possible damage to them. He suggested that the operation of this clause might be limited and not have any general application.

Lord HUGH CECIL thought that the hospital question should have been dealt with on a larger scale and in a separate Bill if dealt with at all. As regards the proposals on the subject of lunacy, he thought there was great need for the reforms which were touched on in the clause and for many other reforms affecting lunacy, but the great reform that was needed was that the people who were confined by reason of mental deficiency or derangement should pay their expenses and no more, and it should not be lawful to make a profit out of any form of disease, and certainly not out of mental infirmity, because the tendency was so overwhelming not to cure the patient, but to treat him very kindly and to keep him where he was. This clause merely touched in a most half-hearted way the whole subject, and so far as it did touch it he thought it did so in a most dangerous way. It was with reluctance that he would vote against the Bill, but he was sure that it would do an enormous amount of good to the public service if they rejected the Bill or any Bill of that kind.

*November 9th : Ministry of Health Bill (Abstract, re Clause 10).—*The debate on the second reading of the Ministry of Health (Miscellaneous Provisions) Bill, and on the motion for rejection of the Bill by Lord WINTERTON, was resumed.

Lieut.-Col. NATHAN RAW said the Bill was one of first-class importance to the community. As a medical man who had a fairly large experience in the treatment of lunacy he welcomed Clause 10, which in its general principles was a much-needed reform, though some modifications might have to be made in it in committee. Prevention was better than cure. He could assure the House that a great number of people are certified as lunatics and sent into ordinary asylums who need never go there, and who might have been spared the stigma of being certified as insane by a few weeks or months of treatment such as was indicated under this clause. As the law stood at present this was not possible, at least for the working classes. A great many poor women suffered from mental aberration as a result of childbirth. They required very careful supervision and very special nursing. This could not be done in a cottage. The only thing to do was to send the case to an asylum. Other cases arose out of alcoholism, pneumonia, influenza and Bright's disease. Most of those people could make a complete recovery in the course of a few weeks or months if they could have the advantage of treatment which was provided under the clause. War had shattered the nervous system of many thousands of our soldiers. Very few were insane. They were suffering from neurasthenia and nervous collapse, which in a few weeks or months might be cured. He should like to see special mental wards attached to all general hospitals, in which the cases of soldiers suffering from shell-shock and mental disturbance and in the early stages of mental disease could be treated. The clause was entirely voluntary. In some cases the patient would not be able to give his consent, and he suggested that in those cases the nearest relative might act. He also suggested that the recommendation of one medical man should be sufficient.

Lieut.-Col. FREMANTLE said part of Clause 10 was very difficult to support, and yet if they really went into the actual cases which it was meant to meet it was impossible to resist it. The London County Council felt that it was a contribution,

and only a small contribution, to the solution of the problem of dealing with the cases of mental deficiency and disorder in their early stage. The main objection to the whole question from the professional standpoint was that they were dividing what was essentially one. The problem of mental disorder ought to be treated as a whole.

The motion for rejection of the Bill was negatived by 156 votes to 76 and the Bill was then read a second time.

November 15th: loss of memory cases.—Mr. SWAN asked the Minister of Health if steps would be taken to remove from lunatic asylums and Poor-Law institutions all discharged soldiers and sailors suffering from temporary loss of memory attributable to the war, and place them in homes suitable for their case and compatible with the service they have rendered to the State.—Dr. ADDISON replied: I am advised that no discharged soldiers or sailors are known to be in asylums who are there because they suffer merely from temporary loss of memory attributable to the war. There are, of course, many ex-service men suffering from various forms of certifiable insanity in which loss or impairment of memory may form one of the symptoms. Such men are kept as private patients under satisfactory conditions. To remove them to separate homes or institutions would be neither economical nor in the interests of the patients themselves.

November 22nd: unidentified mental cases.—Lieut.-Com. KENWORTHY asked the Minister of Pensions whether a photographic gazette of all unidentified ex-service men who were inmates of mental hospitals was being prepared; if so, when it would be ready and how it would be distributed.—Major ENTWISTLE asked the Minister of Pensions if it was a fact that a number of unidentified ex-service men were at the present time inmates of lunatic asylums and mental hospitals; and, if so, would he at once arrange for the publication of a journal containing photographs of these men, and issue it to the general public in the hope that some of these men might be identified by relatives and friends.—Major TRYON replied: I am glad to have this opportunity of correcting the unfortunate impression which seems to be prevalent that there are many unidentified ex-service men in mental institutions. The fact is that of all the male patients admitted since August 1st, 1914, to county and borough asylums in England and Wales only four are at present unidentified; and of these two are over 60, one over 50, and the other is about 16 years of age. My right honourable friend, the Secretary for War, in a reply on November 17th, stated that there was no unidentified soldier in the mental hospitals under the control of the War Office, and so far as my Department is aware, there is no unidentified ex-service man in any other mental institution.—Dr. MURRAY: Does that apply to Scotland, or only to England and Wales?—Major TRYON: I have not had the whole of the returns from Scotland, but I have the hope that no such cases will be found in Scotland.

November 24th: Ministry of Health Bill (Abstract, re Clause 10); Standing Committee A.—Mr. THOMSON moved an amendment to leave out the words "for a period not exceeding six months or any longer period not exceeding in all twelve months as may be approved by the Minister and whether for payment or not." He submitted that the clause as it stood made contradictory reading. They all realised the absolute necessity of doing something at once for these shell-shock cases and nervous disorders which were the result of the war, in addition to the large number of the civil population who had shown incipient signs of mental disorder. There must, however, be no compulsion, and if the second part of the clause was to be effective patients must be able to leave when they liked. They were suspicious of the working of the Lunacy Law. These cases should be dealt with on the same lines as ordinary physical ailments. An atmosphere of freedom was necessary to their recovery.—Dr. ADDISON said he sympathised with the objects of the honourable Member, but he did not quite see how he was achieving them by this amendment. There were a number of amendments on the paper designed to secure real freedom for the patients, a considerable number of which he hoped the Committee would accept. The amendment was withdrawn.

Dr. ADDISON accepted an amendment, moved by Mr. C. EDWARDS, to limit the period to six months. Every case, he said, would be reviewed at the end of that period.—The amendment was agreed to.

Earl WINTERTON moved to leave out the words "whether for payment or not." He thought that in all institutions for the treatment of disease, whether mental or

other, the ideal to be aimed at was the institution which made no profit out of its patients. A great friend of his was literally killed by the treatment he received in a nursing home. Scandals had been shown up from time to time in the case of these private nursing homes. There was an unfortunate lady whose case attracted considerable attention some time ago. She wrote two articles under a *nom de plume* in which she showed how she had been an ordinary inmate of a so-called mental hospital, the sort of "rest-cure" hospital which he assumed would be contemplated under this clause. He thought the evidence she brought forward was indisputable that she was really treated extremely badly. He would quote from a letter which she had written to him on the subject. She said that while a so-called voluntary inmate of a mental hospital of the highest standing, and while under the "protection" not only of such safeguards as were proposed in the new Bill, but of Section 315 of the Lunacy Act, 1890, she was easily and with complete impunity certified and incarcerated in that institution as a lunatic by pre-arrangement. That kind of case might easily arise when they had a system of homes run for profit. The lady he had mentioned was asked to sign a document when she arrived at the hospital in a very nervous state. She did so, but she did not know that that document would afterwards be used as evidence of her consent to enter the home. He could not see that these safeguards would prevent abuses. The whole idea was repugnant to him, especially where ex-soldiers were concerned.

Dr. ADDISON said he entirely agreed with the noble lord's general proposition, and he welcomed such a statement from him very much, especially as he was intimately associated with the voluntary hospital movement, and in general disliked the idea of a profit being made out of this class of patients. But they had to deal, not with something that they would like, but with something that they had actually got. In the vast majority of ex-service cases it would be a payment in respect of services rendered. It would be the Ministry of Pensions that would make the payment in respect of ex-service men still under their care. As to scandals, he did not know anything about the particular case to which the noble lord referred, but he knew well enough that under any imaginable statute cases of that kind would arise. The Government's plan was to avoid, as far as was humanly possible, wrong arising. A very large percentage of men suffering from incipient mental disorders were cured within six months. He was afraid it was quite impossible to face the facts, and not to recognise that in a considerable number of cases, whether there was a profit or not, some payment would be made in respect of the treatment; otherwise they would enormously limit the use to which this clause could be put.

Lieut.-Col. NATHAN RAW said he wished early treatment to be given to prevent the mental disorder becoming incurable. Although they would all like to be philanthropists, and to treat all cases of incipient mental disorder without a profit, it was obvious that it could not be done. The only alternative was for the State or the proper authority to deal with all these cases. In the course of six months it could be seen whether a case was going to be cured or to pass into the state of lunacy. In 99 cases out of 100 the patient's liberties would be carefully looked after.

Major FARQUHARSON thought that the question of profit was an important point. A voluntary boarder who had gone into one of these homes had in a measure pleaded guilty, as it were, to being of an unsound mind. There was a prejudice of their case to begin with, and it only required a small degree of eccentricity or mental aberration or deviation from normal conduct on the part of the patient for one or two learned gentlemen—medical men—and the person who honestly regarded himself as taking charge in the legal sense of that individual to get him certified insane. There was therefore a very real danger. All these dangers could be dealt with by the simple expedient that before that person was certified a lunatic a report must be submitted in writing to the Minister of Health.

Lieut.-Col. FREMANTLE thought that the treatment of these diseases as ordinary diseases in general hospitals could not be considered the ideal and proper or normal course. Those who had had experience of a good many general hospitals knew that, whereas formerly they had their lunatic wards, it had now become necessary to exclude mental cases. The general tendency was to separate mental cases from ordinary cases for reasons that everyone could understand. Surely the ideal condition of affairs was that which with great satisfaction they had seen developed during the last ten or twenty years—namely, that lunatic asylums should no longer be

asylums where people were shut up for the protection both of themselves and of the public (which was the basis of the Lunacy Laws), but that they should be mental hospitals with a view to general treatment, improvement, and recovery with as little delay as possible. He had with him a report of the Committee of the Association of Medical Psychologists, a body which might be taken to hold the approved and recognised scientific views of those who dealt with these matters. The report was dated 1918, and contained proposals which definitely aimed at a system of voluntary boarders in mental hospitals. There were difficulties in the way, but they would all agree that the ideal thing was to have a suitable registered hospital, or private home, undertaken by people as an act of philanthropy to which patients could be sent. The actual facts were that these homes, private homes or registered hospitals, which had power to take in voluntary boarders at the present time, really catered for the middle and upper middle classes. But it was necessary to provide for people who could not afford high fees for proper treatment. He did not see how this clause met the case in any way. That splendid institution, the Maudsley Hospital, was founded by a medical man at a cost of £40,000 for the people of London. It was entrusted to the County Council, as lunacy authority for London, and was opened, he thought, just before the war. But it was taken over for war purposes, and had not been used for these purposes. By provision of Parliament it must be made available for the class of treatment under consideration. It had 140 beds, but that was a drop in the ocean considering the requirements of London. The Mental Asylums Committee of the London County Council had definitely approached the Minister of Health with a strong request to be able to introduce in these mental hospitals a system of voluntary boarders, but the right honourable gentleman's argument was that they wanted to keep this kind of case and the system of control free from the stigma of lunacy. If they could do so, well and good, but the stigma of lunacy was not the only thing to be considered, and if they could not get provision made for them in any other way, they, as the authority to deal with the sufferers in London, felt most strongly that they must make provision for them in the ordinary mental asylums or hospitals. In medical science they should always see that the relationship between the different classes of hospitals was mutual. There were the cases of relapsed patients who came frequently and asked to be allowed to return to the mental hospitals where they had once recovered. That was where they could have voluntary boarders without re-certification. He claimed that the county mental hospital should be given the power to take in voluntary boarders. It was the only way of introducing this up-to-date treatment which they all desired to give to incipient cases among the working classes.

Dr. MURRAY said he thought that they would be compelled for some time to take advantage of any likely institution that would help in this matter. He thought they should aim at treating these mental cases so far as possible in general hospitals so as to get rid of the stigma of lunacy, even if they provided, as they would be compelled to provide, separate intermediate institutions. He had no fundamental objection to payment for those persons who entered these institutions, and he had no great objection to people running them for profit if they were properly inspected and supervised by the Ministry of Health. But he would have no connection between the Board of Control and these cases.

The amendment was still under discussion when the Committee adjourned for the day.

November 24th: Lunacy Act, 1890.—Mr. MYERS asked the Minister of Health whether he would take steps to have posted up in the waiting-rooms of all public asylums Section 79 of the Lunacy Act, 1890, which gives a relative or friend of the pauper patient the right to claim that the patient be delivered over to their care on their undertaking responsibility in regard to him that he shall not harm himself or others or become chargeable to any union.—Dr. ADDISON replied: This suggestion is at present under the consideration of the Board of Control, who have recently directed certain inquiries in the matter.

Lunacy documents.—Mr. TYSON WILSON asked the Minister of Health whether, in view of the possible risk to the security of integrity of the official documents upon which any person was committed to an asylum, he would take steps to ensure by regulation or otherwise that henceforth the originals of such documents should, immediately upon their delivery to the manager of the asylum, be forwarded by him

to the Board of Control for safe keeping; that the said Board supply to him by return copies of these documents certified as true copies by two of the Commissioners, which copies should serve, instead of the originals, as the authority for his detention of the patient, this regulation being rendered necessary by recent admitted instances of such documents having been tampered with; and would he say where, in the case of the extinction of a licence, such documents had been preserved up to the present.—Dr. ADDISON replied: The custody of the documents to which the honourable member refers is governed by the provisions of the Lunacy Act, 1890. If the honourable member will give me any information that is at his disposal as to any alleged tampering with documents I will make immediate inquiries into the matter.

November 25th: Ministry of Health Bill (Abstract, re Clause 10); Standing Committee A resumed consideration.

Mr. T. THOMSON moved an amendment to provide that such institutions as those receiving cases of incipient mental disorder should not be run for private profit. The whole idea of making a profit out of these cases was repugnant, and would open the door to abuses from which a large number of shell-shocked ex-soldiers might suffer. The medical profession ought not to desire to trade on these afflictions.—Dr. ADDISON agreed that the ideal would be that no private profit should be made out of these cases, but he could see no reason why, if adequate safeguards were provided, persons skilled in that particular form of private enterprise should not profit out of their skill.—Major MOLSON opposed the amendment, and resented the statement that the medical profession farmed and traded on these cases. The profession should be allowed to make a fair profit.

The amendment was negatived.

The Committee agreed to amendments requiring an inmate of such an institution to give forty-eight hours' notice of his intention to leave, and also substituting the word "leave" for "be discharged therefrom."

Lieut.-Col. NATHAN RAW moved to insert after "writing" in Subsection (b) of Section 2 of the clause the words "or in the case of his mental incapacity by that of his nearest relative." He said there were certain cases of acute delirium or acute violence where a person would be unable to give his consent to admission to an institution.—Earl WINTERTON opposed the amendment on the ground that the State recognised only two classes—the sane and the insane. If a person was unable to say that he was willing or unwilling to go into such a home he ceased to be a sane person and he was no longer a "borderland" case.—Dr. ADDISON agreed with what Earl Winterton had said, but he was advised that under the clause as it stood a large number of shell-shock cases might be excluded. Cases of delirium tremens would also be excluded. He would leave the matter to the discretion of the Committee, although personally he would vote for the amendment.

The amendment was rejected by 20 votes to 14.

The subsection was afterwards amended by providing that the certificate of one doctor instead of two should be sufficient, and Clause 10 as amended was agreed to by 17 votes to 10.

December 8th: Ministry of Health Bill (Abstract, re Clause 8). Third Reading.—Mr. MYERS moved to leave out the clause 8, which deals with the treatment of incipient mental disorder. He said the clause was quite inadequate. It would not achieve its purpose, and even if it did it was not a fraction of what the victims of shell-shock were entitled to.—Mr. R. RICHARDSON, in seconding, said that poor soldiers would be driven into homes where they would be in terrible dread of being exploited by the people who were running these places.

Col. LESLIE WILSON, on behalf of the Government, contended that these men, and all those who entered these institutions, were safeguarded as far as it was possible to safeguard them. It would only have been possible to go further by the expenditure either by the State or by the local authorities of a very large sum of money for the establishment and maintenance of special homes for this particular object, and he did not believe that such expenditure would have been acceded to by the House.—Mr. RAWLINSON, in supporting the amendment, said that the clause was a distinctly dangerous one. The lunacy law in this country was designed to prevent anything like unlicensed houses for lunatics. This clause allowed certain people who were not under the control of the Lunacy Act to receive lunatics. The Lunacy Commissioners had experience of this work, but these men who set up these institutions

were not to be responsible to those Commissioners; they were to be responsible to the Ministry of Health, who had little or no experience of lunacy. If they had an opposition this sort of thing would not be allowed to go on.—Mr. ORMSBY-GORE said it was quite clear that no shell-shocked soldier would come under the operation of this clause, which was limited to persons suffering from mental disorder which was incipient in character and of recent origin. Practically all the shell-shock cases were being dealt with in special neurasthenic hospitals under the Ministry of Pensions, and would remain under that Ministry until they were cured. They were legislating here for the type of person who might or might not become a lunatic. There were many of these cases, especially among young persons. There were also cases of adolescent insanity and delirium tremens. The way to deal with shell-shock cases was to secure a limited number of seaside boarding-houses, with the most grandmotherly landladies they could get, properly certified by the Ministry of Health. Once they got them into the atmosphere of an institution and on the slope that led to lunacy all chance of curing such a case or of holding it back was gone.—Mr. T. THOMSON argued that the ex-service man was not being dealt with adequately by the Ministry of Pensions, and this clause was only attempting to touch the fringe of the question. It would be better to leave this alone entirely in order to get a more comprehensive and effective scheme next session.

Earl WINTERTON moved and Major MOLSON seconded the adjournment of the debate as a protest against the absence of the Minister of Pensions, but the motion was rejected by 104 votes to 18.

Lieut.-Col. FREEMANTLE said that it was seen by everyone that the fringe of lunacy could not be dealt with by the lunacy laws and lunacy systems. It must be dealt with entirely separately. That was no new discovery. The whole of modern treatment was in that direction. He had a report by the Medico-Psychological Association dated 1918, and it dealt with the different points summed up in this Bill. The early symptoms of disorder often occurred long before certification was possible, and medical opinion was that they must deal with this point apart from the compulsory or penal clauses of the lunacy laws from the social point of view. They ought to be treated as mental disorders, and that was what the Bill did. The best treatment for these people was in private houses and in family life. Many of these cases, instead of being once and for all labelled as lunatics, were curable and would be cured, but they wanted the homes to be under guidance and control. The proposals of the Bill were grossly inadequate. They hardly touched the real poor—the real working classes as they used to understand them. A physician with whom he had been in correspondence had written to him to say that he agreed that this clause was a very workable start, and he hoped it would go through all right.—Capt. ELLIOT said this was not an untried experiment. It was a system which had been in operation for the last fifty-four years in Scotland. In Scotland the position had been very much more advanced than anything suggested in this Bill. The private case could be consigned to a private residence for not exceeding six months on one medical certificate under Section 13 of the Lunacy Law of 1866. It had worked so well in practice that many cases of people who could afford it had been sent from England to take advantage of this temporary residence, where they were not certified as lunatics, and had a chance, if they recovered, of going back into normal life without the asylum stigma attaching to them.—Earl WINTERTON: Have these institutions in Scotland dealt with the class of patient which the Minister wishes to deal with under this clause—the poorer class of the population who cannot afford it?—Capt. ELLIOT said the people were undoubtedly better off than the poorer classes, but in the cases to which the Minister was referring, the soldier under the Ministry of Pensions, there would be funds available for their treatment.

Dr. NATHAN RAW said, as one who had been attending many thousands of certified lunatics in and out of asylums, he might inform the House of the real meaning of this clause. He contended that this clause had no reference whatever to the Lunacy Acts. Its whole object was to treat mental disorder exactly as they would treat any other disease that the human body was subject to. There was no form of compulsion whatever, and the object of the forty-eight hours' detention was that if a person undergoing treatment in one of these institutions or homes suddenly became suicidal or homicidal it would be obviously unsafe to allow him to walk out, and in these special cases forty-eight hours' notice should be given so that

his friends might be communicated with and he might be taken away. The forty-eight hours' detention was simply to protect the man himself or the community from a possible murder. He impressed upon the House the great importance of giving everyone a chance who was attacked, as any of them might be at any time, with incipient mental disorder to get well. The only alternative, as the law at present stood, was that any person suffering from incipient mental disorder must go into a lunatic asylum. A rich person could fit up his house as a private lunatic asylum, with nurses and doctors, but the poor could not do that. They had no alternative but to be certified and put in an asylum. In the case of a person who was certified as a lunatic there was the very greatest difficulty in getting employment again in any capacity, and the object of this clause was to try and first of all cure insanity in the earlier stages so as to prevent it becoming incurable, and to prevent the stigma of lunacy falling on persons who had unfortunately been attacked with incipient mental disorder. He impressed upon the House the great importance of passing this reform, which would be of enormous benefit to the community.

Dr. ADDISON said that though this question did not apply only to war cases, during the war this method was used particularly for the treatment of these mental disorders, and the evidence became overwhelming as to the necessity for encouraging this class of treatment. There was the greatest necessity for these men not being labelled lunatics. With regard to the forty-eight hours' notice, that was the maximum time detention might be made, except in the cases mentioned by Dr. Raw, and the regulations provided for in Paragraph 4 of the clause, which had to be laid on the table of the House and be approved by the House, would set down the conditions clearly.—Major HAMILTON: Could not the right honourable gentleman insert some such words as these: "if fit to leave, or, if not so fit, if he delivers forty-eight hours' notice"?—Dr. ADDISON said he would give that suggestion careful consideration.

On a division, the motion to leave out clause 8 was negatived by 88 votes to 24.

Col. L. WILSON moved an amendment enabling anyone in the institutions for the treatment of incipient mental disorder to come out at any time on giving notice in writing, except that where a person, in the opinion of the superintendent, or other person aforesaid, was not in a fit state to leave he might be detained for a period not exceeding forty-eight hours from the date of the notice.—The amendment was agreed to.

Major ENTWISTLE moved a new subsection to provide that, except in cases of homicidal mania, no person should be certified as a lunatic under the Lunacy Acts, 1890 to 1911, while detained in any institution, home, or house under the clause. He said it was important that there should be no suspicion that these homes were an easy way to get into a lunatic asylum. This safeguard was the most important that could be inserted in the Bill.—Mr. RAWLINSON seconded.—The amendment was rejected on a division by 81 votes to 23.

HOUSE OF LORDS.

December 14th: Ministry of Health Bill.—Lord STRACHIE moved the rejection of the Bill. After a commendably brief discussion, the second reading was rejected by 57 votes to 41.

EDUCATIONAL NOTES.

Maudsley Hospital.—Part II of the second course for a diploma in psychological medicine, as announced in our last issue, will commence in January, 1921. The syllabus is as follows:

Six Lectures on the Pathology of Mental Diseases, including Brain Syphilis, its Symptomatology and Treatment. By Sir Frederick Mott, K.B.E., M.D., LL.D., F.R.S., F.R.C.P. On Mondays at 2.30 p.m., commencing on January 3rd, 1921. Disordered function with no changes in the brain, the psychoses and psychoneuroses, *e.g.*, epilepsy, neurasthenia, psychasthenia, manic-depressive insanity—mental diseases with macroscopic and microscopic changes in the brain—amentia—idiocy and imbecility—primary dementia—dementia præcox—secondary dementia—injury—tumours—abscess—meningitis—lymphatic infection—syphilitic brain disease—parenchymatous syphilis—general paralysis and tabes dorsalis—arterio-

sclerosis—arteritis—hæmorrhage and softening—alcoholic dementia—lead encephalitis—deficiency diseases—chronic insanity and epilepsy.

Eight Lectures on the Psychoneuroses. By Bernard Hart, M.D., Lecturer on Mental Diseases, University College Hospital. On Mondays at 5 p.m., commencing on January 3rd, 1921. Nature, causation and relationships of the psychoneuroses—classification of the psycho-neuroses—historical review of the subject—hysteria—psychasthenia, anxiety, compulsion neurosis, etc.—general principles of treatment—relationships of the various schools of treatment—treatment by suggestion, persuasion, and the various analytical methods.

Eight Lectures on the Practical Aspect of Mental Deficiency. By F. C. Shrubbsall, M.D., F.R.C.P. On Wednesdays at 2.30 p.m., commencing on January 5th, 1921. The concept of mental deficiency—classification, causation and morbid anatomy of mental deficiency—moral deficiency—methods of testing mental capacity—differential diagnosis—the laws of mental deficiency in relation to ascertainment and treatment—the principles of treatment and training.

Six Lectures on Crime and Insanity. By W. C. Sullivan, M.D., Medical Superintendent, Broadmoor Asylum. On Wednesdays at 4.30 p.m., commencing on January 5th, 1921. Definition of crime—biological and sociological factors in different forms of criminality—theories of punishment—concept of responsibility—evolution of ideas as to criminal responsibility of the insane—crime in particular forms of mental disorder—crime in relation to epilepsy—mental deficiency and crime—moral imbecility—the relation of alcoholism to crime and to insanity—social and individual causes of alcoholism—prophylaxis of alcoholism—characteristics of alcoholic crime.

Twelve Clinical Demonstrations in Neurology. By Sir Frederick Mott, K.B.E., M.D., LL.D., F.R.S., F.R.C.P., and F. Golla, M.D., F.R.C.P., Physician, St. George's Hospital. On Thursdays at 2.30 p.m., commencing on January 6th, 1921. The first six demonstrations will be given by Dr. Golla at the Hospital for Paralysis and Epilepsy, Maida Vale. An announcement will be made later regarding the six clinical demonstrations by Sir Frederick Mott.

Ten Lectures or Demonstrations on Differential Diagnosis and Treatment of Mental Disorders: Legal Relationships of Insanity, by C. Hubert Bond, D.Sc., M.D., F.R.C.P. On Fridays at 2.30 p.m., commencing on January 14th, 1921. (Demonstrations at Hanwell or Claybury on February 4th, February 18th and March 4th.)

Eight Lectures on the Symptoms of Mental Disease. By E. Mapother, M.D., M.R.C.P., F.R.C.S. On the following Fridays at 4.30 p.m.: January 7th, 14th, 21st and 28th, February 11th and 25th, March 11th and 18th.

If sufficient applicants are forthcoming, Part I of the Third Course of Lectures and Demonstrations will be commenced in April.

Will all intending applicants please communicate as soon as possible with The Director, Pathological Laboratory, Maudsley Hospital, Denmark Hill, S.E. 5.

Tavistock Clinic for Functional Nerve Cases.—Two courses of lectures are announced.

A course of five lectures on Mental Deficiency will be given by Dr. W. A. Potts, M.A., M.D., at 5.15 p.m., on Mondays, beginning January 17th, 1921.

General Introduction: Nature of mental deficiency, causation, pathology—classification of the various forms and grades, and clinical types—sociological aspects: work-houses, reformatories, prisons, rescue homes, etc.—diagnosis—mental tests—certification under the Mental Deficiency Act (1913) and the Elementary Education Acts (Defective and Epileptic Children, 1899 and 1914), and other means of treatment.

A course of five lectures on Analytical Psychology will be given by Dr. Maurice Nicoll, B.A., M.B., at 5.15 p.m. on Mondays, beginning February 21st, 1921.

The nature of the present conflict over the significance of the unconscious and its bearing on the future of analytical treatment—symbolism of the infantile orientation (the first psychological orientation)—symbolisms of rebirth in dreams—the intermediary stages between the first and second psychological orientations—symbolism of the "soul" orientation (the beginning of the second psychological orientation, and the movement away from the mother)—definitions of that psychological function which appears in the unconscious and can be termed

soul or *anima*—suggestions on the prospective or synthetic significance of Freud's *Irma* dream, as distinguished from its reductive interpretation—the importance of the manifest content.

Fees for each course—medical practitioners, £2 2s., medical students, £1 1s. Owing to limited accommodation it is particularly requested that tickets for the course be taken in advance from Miss A. O. Trotter, 18, Eaton Place, S.W. 1.

THE INTERNATIONAL JOURNAL OF PSYCHO-ANALYSIS.

THE first number of this journal has recently been published, with Dr. Ernest Jones, President of the International Psycho-Analytical Association, as editor. The journal will rank equally with the *International Zeitschrift für ärztliche Psycho-analyse* as the official organ of the Association. The journal is to be devoted to psycho-analysis and kindred studies, but its scope is to extend beyond the clinical sphere, and will include the application of psycho-analysis to literature, education, mythology, philology, sociology and anthropology. The aims and purpose of the journal are indicated in an introductory editorial article, and it is made clear that its policy is the development and maintenance of the concepts of Freudian psychology, as distinct from "those disruptive and reactionary tendencies which necessarily accompany psycho-analysis."

Dr. Ernest Jones contributes a sympathetic obituary notice of Dr. James Jackson Putnam, the American neurologist, who, in his later years, was largely responsible for the development of the principles of the Freudian school in his own country. The most noteworthy contribution is that by Prof. Freud, a reprint of which is included in the present number of the *Journal of Mental Science*. Mr. Flugel writes an article on "The Character and Married Life of Henry VIII," and concludes his study by emphasising the value of the application of psycho-analytic theories for the understanding of historical personalities. Dr. Douglas Bryan furnishes an elementary didactic article on "Freud's Psychology," and it is proposed that each number shall contain a contribution of this kind. Dr. Stanford Read writes a review of the English and American literature during the last six years bearing upon psycho-analysis.

The journal is to be issued quarterly, and the subscription per volume is £1 10s.

UNCERTIFIABLE MENTAL CASES.

"HOMES OF RECOVERY."

A MEMORIAL signed by 104 Members of Parliament has been forwarded to the Minister of Health urging the provision of hostels or "homes of recovery" for uncertifiable mental cases, to be run by local authorities on a purely hospital footing and be kept wholly apart from any connection with the Lunacy Board or lunacy administration, so that these early cases may not be deterred from entering them voluntarily. The memorial adds: "We would urge the primary importance of dealing with the early and most curable stage of mental instability in a way which shall dissociate it from confirmed or dangerous insanity, and afford a reasonable prospect of speedy recovery under the appropriate influence of exhilarating and hopeful surroundings, combined with interesting and congenial forms of occupation. The immediate provision of such homes or hostels necessitates no proposal for change in legislation, since borough councils are already empowered by the Public Health Act, 1875, to run such hospitals (free from detention and without any claim for profit), and an extension of these powers to other county councils could be readily obtained. The inmates of such hostels would be controlled during their stay by the rules of the place, but be free to leave on giving a specified notice. Under no circumstances except those of extreme urgency should any inmate be certified while in a hostel; the patient's friends must be summoned to remove him first, and certification effected (if necessary) after his departure by an independent doctor. No form of detention by irregular means must be countenanced, so that the hostels may not come to be regarded as in any sense 'half-way houses' to licensed or public mental hospitals.

"The immediate adoption by the Health Ministry of measures to enable and encourage local authorities to supply or aid the supply of homes intended for uncertifiable mental cases and free from connection with lunacy would prove an enormous boom, not only to doctors and patients, but also to patients' friends and to the community at large, including especially those classes of ex-Service men whose nerves have been temporarily unhinged and shaken through the intense severity of the conflict in which they have recently been engaged. If all such patients, civilian or military, were intercepted on the downward track, the gain to the nation would be incalculable, not to speak of the gain to the overburdened taxpayer arising from an eventual material reduction in our ever-increasing and unproductive asylum expenditure."—*Daily Telegraph*, November 29th, 1920.

THE LATE DR. C. A. MERCIER.

THE testamentary dispositions of Dr. C. A. Mercier, who died on September 1st, 1919, contain an offer, when the sum has accumulated, of £20,000 in the first place to the University of London for the endowment of a professional chair of Rational Logic and Scientific Method. Dr. Mercier's scheme is as follows:

"The purpose of this foundation is that students may be taught, not what Aristotle or anyone else thought about reasoning, but how to think clearly and reason correctly; and to form opinions on rational grounds, the better to provide that the teaching shall be of this character, and shall not degenerate into the teaching of rigid formulæ and worn-out superstitions, I make the following conditions:

"The professor is to be chosen for his ability to think and reason and to teach, and not for his acquaintance with books on logic, or with the opinions of logicians or philosophers. Acquaintance with the Greek and German tongues is not to be an actual disqualification for the professorship, but in case the merits of the candidates appear in other respects approximately equal, preference is to be given first to him who knows neither Greek nor German; next, to him who knows Greek but not German; next to him who knows German but not Greek; and last of all, to a candidate who knows both Greek and German.

"The professor is not to devote more than one-twelfth of his course of instruction to the logic of Aristotle and the schools, nor more than one-twenty-fourth to the logic of Hegel and other Germans. He is to proceed upon the principle that the only way to acquire an art is by practising it under a competent instructor. Didactic inculcation is useless by itself. He is, therefore, to exercise his pupils in thinking, reasoning, and scientific method as applied to other studies that the students are pursuing concurrently, and to other topics of living interest.

"Epistemology and the rational grounds of opinion are to be taught. The students are to be practised in the arts of defining, classifying, and the detection of fallacies and inconsistencies.

"The principle of causation is to be taught as a process occurring in Nature and applicable to material things, and not as a notion in the minds of philosophers.

"Subject to these requirements, a wide discretion is to be allowed to the lecturer."

CORRESPONDENCE.

To the Editors of the JOURNAL OF MENTAL SCIENCE.

SIRS,—I have read your Editorial comments upon my criticism elsewhere of the causes of the appalling death-rate among the patients in the asylums of this country, as published in the Report of the Board of Control, dated 1919, and which I attribute in the main to inadequacy and meagreness of the food, and therefore to insufficient vitamins.

May I say that neither you nor anyone else quotes the average calories allotted to patients in the asylums, and you appear desirous of effecting a compromise between the two methods of regarding a dietary, *viz.*, providing an adequate supply of vitamins—which are possibly some activators to produce the synthesis of other nutrient bodies—and determining a dietary upon a caloric value.

I have been long of the opinion that the basis upon calories has been found wanting, chiefly because the human organism is something more than a mechanical laboratory. Pure protein, fat, carbohydrates, salts and water, though supplying the full caloric needs of a dietary, are yet insufficient for growth and for maintaining energy. In Hopkins' experiments with rats which were fed on a caloric basis, they ceased to grow until fresh milk was supplied, which indicated that in spite of full caloric value, some factor in the diet—the vitamins—was nevertheless indispensable for health. This factor probably forms only a small fraction of the food; its chemical nature is unknown, and even its physiological function. All we do know is that it is soluble in water and in alcohol, and that it is destroyed by boiling as well as by long keeping. Its nature may be of two or more kinds—one for growth and one for nutrition; at any rate it is only to be found in fresh foods, mainly meat, milk, butter and fruit. The food-deficiency diseases have already demonstrated to us the need for giving this factor consideration in the feeding of large communities for a long time.

In dealing with calories, energy is measured from the amount of heat required for the complete combustion of food as recorded in a calorimeter, whilst no allowance is made for the quality of the food, the power of the person's digestion, or his capacity for assimilating different kinds of food. Even animal and vegetable proteins may vary greatly in their readiness for assimilation, and therefore in their power of supplying nutrition. In estimating the caloric value it is assumed that because the whole of the constituents of food are completely oxidised in a calorimeter, the whole potential energy thus obtained is available for nutrition, which is not the case. The food of asylum patients even before the war was not of the highest quality. The authorities dared not feed the most subordinate members of the staff as they fed the patients; they would mutiny if the attempt were made. And it would be absurd to suggest that the poor food supplied to patients possessed the average caloric value; and although the bread given to them was what is described as "middlings," it was healthy because the outer husks contained the vitamins.

The heat-value of the food when metabolised within the body therefore does not by any means represent the caloric value registered in a calorimeter; and so discontented have practical people become as to the results of basing a dietary upon its caloric value, that although the value of the ordinary diet is given as 3,500 calories—and I should like to know the average calories allotted to the inmates of asylums!—we had to increase this average during the South African War to 3,900, and in the late war to 4,000 to 5,000 calories, the men being much better in consequence, and it is conclusive that laboratory experiments for a short time cannot be accepted as the basis of what is suitable for the dietary of a mixed sick community for long periods. The discontent with calories has extended so widely that an entirely new method of calculation has been suggested to estimate a satisfactory dietary, *viz.*, the *Nem* method, founded upon the unit of a glass of milk—100 *nems* or a hectonem—based upon the relation between the sitting height, the weight of the body and the surface of the alimentary canal, which have been expressed in a simple formula by Pirquet.

You know, Sirs, that all the patients in the various mental hospitals without exception are of the "sick" class, and that for this class in particular a diet in excess of the actual bodily needs is necessary, there is need for an abundance of good food to aid the restorative powers of the body, and a further supply to act as a reserve of energy to resist the invasion of infections of various kinds, from which they succumbed during the war in colossal numbers—a death-rate which, I fear, has been unparalleled since the darkest days of the history of the insane.

I do not say there were not reasons for curtailing the dietary to help to save the country. I merely state a fact that the appalling mortality of the poor insane was intimately connected with the deficiency of vitamins, *i.e.*, with the deficiency of

fresh food, and that the deaths occurred from an insufficient and a poor dietary. To suggest other causes is to trifle with the issue.

105, Harley Street,
London, W.

I am, your obedient servant,
ROBERT ARMSTRONG-JONES.

[Soldiers' diet in hospital: Lowest caloric value sanctioned during the war,		2,700	
" " " " " Highest " " " " "		3,832	
Soldiers' diet—front-line troops .			4,000 calories
L.C.C. Mental Hospital Dietary .	Males unemployed .	2,468 to 2,542	"
" " " " " " " " " " "	" employed .	2,829 to 2,903	"
" " " " " " " " " " "	Females unemployed .	2,025 to 2,255	"
" " " " " " " " " " "	" employed .	2,476 to 2,646	"
Men—sedentary	2,500 to 2,800 calories	} E. I. Spriggs, M.D.	
" labourers	3,500		
" heavy work	4,000		
Women—light work	2,000 to 2,200		
" heavy work	2,800		

Eds.]

OBITUARY.

KORBINIAN BRODMANN.

The death of Brodmann is a grievous loss to neurology and psychiatry, not only in Germany but throughout the world. From a memoir by Nissl in the first volume of the *Arbeiten aus der Deutschen Forschungsanstalt für Psychiatrie in München* we glean the following information about him. He was the son of a farmer at Liggersdorf, in Hohenzollern, and was born on November 17th, 1868. After studying medicine at Munich, Würzburg, Berlin and Freiburg, he gained his qualification in 1895. In 1896 he became an assistant at the Nervenheilstalt, Alexanderbad, then under the direction of Oskar Vogt. In 1897-8 he worked for a year at the Pathological Institute at Leipzig. He was an assistant medical officer at the Psychiatric Clinic at Jena (1898-1900), and at the Asylum at Frankfurt (1900-1). From 1901 to 1910 he was an assistant in the Neurobiological Institute of the Berlin University under Vogt. From 1910 to 1916 he was a medical officer of the Psychiatric Clinic at Tübingen, and during the war served voluntarily as a medical officer of a military reserve hospital at Tübingen until May, 1916, when he was appointed by Pfeiffer to a newly-created anatomical post at the Landesheilstalt, Nietleben, near Halle. To Pfeiffer belongs the credit of giving Brodmann such an appointment and such material means as would enable him to continue his researches: until now he had never had an assured social position. At Nietleben he married. In April, 1918, he moved to Munich, having been chosen by Kraepelin to be head of the Department of Topographical Histology in the new German Institute of Psychiatric Research. Happy in his recent marriage and in his new post, and full of plans for work, he was stricken with severe septic poisoning, and after a few days' illness died on August 22nd, 1918. "By his death," says Nissl, "the great hopes we had built on his appointment have been brought to nought. And the saddest thing is that in a certain sense his loss is irreparable. Germany has no second investigator possessing Brodmann's knowledge of the cell architecture of the cerebral cortex, or his ability to put that knowledge to use."

As an investigator Brodmann stands, of course, upon the shoulders of those who preceded him, first among whom must be mentioned Meynert (1868), Betz (1874), and Devan Lewis (1878, 1880). But such technique as those men could command was so crude that for many years nothing more was discovered, and no further progress was possible until the introduction of a selective stain for nerve-cells. Nissl's method of staining with methylene blue opened the way for a fresh advance. The first investigations of the cell-architecture of the cortex by means of selective cell-staining were those of Hammarberg (1895) and Schlapp (1898). In 1900 Shaw Bolton described two different types of structure in the cortex of the human occipital lobe, mapped out the calcarine area, and made the observation that the line of Gennari with the granules immediately above and below it,

represents simply a threefold division of a single layer. This observation gave Brodmann the principal clue to the divisibility of the cortex of the whole neopallium into six laminæ, and so enabled him to clear up the confusion then reigning in the nomenclature of the layers.

When, on going to Berlin in 1901, Brodmann set himself the task of making a topographical survey of the human cortex according to the cell-architecture of its different regions, he saw that if his work was to lead to a knowledge of the structural laws of the cortex and to an explanation, on common principles of organisation, of the multiplicity of structural arrangements met with, it would have to be established on a broad basis of developmental and comparative anatomy. Some idea of the immensity of the labours he accomplished in the course of the next few years can be gathered from his celebrated book, *Vergleichende Lokalisationslehre der Grosshirnrinde*, published in 1909. An even more impressive insight into his activity is afforded by his series of *Mitteilungen* (1903-8), for in them we can follow the steps of his research in detail. Not only had he to amass and investigate a great quantity of anatomical material extending over the whole mammalian series, but he had to perfect a special technique. For his purpose he required complete uninterrupted series of faultless, thin and truly plane sections through the whole cerebral hemisphere. He worked out for himself a method of paraffin embedding, and he had a special microtome constructed to his design. The sections had to be selectively stained for nerve-cells and suitable for microphotography. The microphotographs illustrating his publications give no right idea of what microphotography meant for Brodmann's researches, not merely as proof of his statements, but as an essential means of investigation, permitting a simultaneous review, such as the visual field of the microscope can never afford, of wide regions of the hemisphere. Microphotographs show the limits and transitions of the different areas better, and the cortices of different animals can be more easily compared. With the further aid of outlines of the sections, drawn by means of the Edinger projection apparatus, he was able to prepare his famous maps. In 1905 he produced the maps for apes, showing twenty-six distinct areas; in 1909 the maps for man, showing fifty-two areas.

In delimiting areas he relied, not on the behaviour of any single lamina or group of cells, but on the structural arrangements throughout the whole thickness of the cortex. The areas thus delimited he designated by numbers, and he applied identical numbers to homologous areas in different animals of the mammalian series. Designation by numbers is not merely convenient; it has the advantage of avoiding premature assumptions as to the functions of the areas. But Brodmann never regarded descriptive anatomy as an end in itself; for him it was simply a step towards the elucidation of function. Function creates form; therefore if two portions of cortex differ in structure they must differ also in function. This is the justification for his reliance on the totality of the structural characters throughout the whole thickness of the cortex, as the principle upon which his delimitation of areas was to be based. But as there is no light that does not cast some shadows, his insistence on this very sound principle led him rather to under-estimate the importance of another aspect of his problem. Are we to regard the whole thickness of the cortex as constituting the functional unit? How if two portions of cortex structurally differ in respect of a single lamina only? Must there not be some localisation of function in the laminæ taken severally? Bolton (1900, 1903) and G. A. Watson (1907) showed that there is, and to a considerable extent what kinds of functions are thus localisable. Ariëns Kappers (1909) gave additional significance to their observations by relating them with new facts in comparative anatomy. And Brodmann himself, besides confirming Bolton's observation that the inner layers mature earlier than the outer, showed that in lower orders, in contrast with man, they frequently exceed the outer in thickness. But unfortunately, though quite naturally and excusably, he felt he must needs enter into a comparison of the merits of his principle of total structure and the principle of localisation according to layers. His principle has its own great value and use, but, as Nissl says, it is not "superior to" this stratigraphic principle.

The most striking instance of the value of Brodmann's principle is seen in its application to the cortex of the frontal lobe. He showed that the frontal lobe is divisible into two main parts, developmentally different and structurally delimitable; a posterior portion, the regio præcentralis, situated immediately in front of the

Rolandic sulcus, and coincident, according to modern physiological knowledge, with the motor area; and an anterior portion, the regio frontalis, which extends to the frontal pole and orbital surface, of whose precise function, even in man, hardly anything is yet known. While in lower mammals this frontal cortex proper is almost entirely wanting, it develops in the animal series in increasing degree, not only in superficial extent, but in respect of differentiation of its component areas. In the rabbit, for example, it constitutes only 2·2 *per cent.* of the total cortex; in man, 29 *per cent.*

How is Brodmann's work to be continued, and what new inquiries arise out of it? Some of the areas that he distinguished are not sharply demarcated, but fade into one another gradually; the limits assigned to these will have to be adjusted by other criteria, *e.g.*, the results of anatomical experiment. The cortex is directly connected with the thalamic nuclei; what particular cortical areas, then, are connected with particular thalamic nuclei? "I can see still," says Nissl, "the gleam in Brodmann's eyes as I showed him my preparations proving that his areas '24' and '32' in the rabbit are exclusively and directly connected with a certain thalamic nucleus of very characteristic structure." Clinical experience and pathological observations will doubtless help to clear up many points not yet settled. But the greatness of Brodmann's work, carefully and elaborately detailed as it is, does not lie in details; it lies in his thorough investigation of the cortex through the entire mammalian series from one unvarying standpoint. Whatever the future may have to tell us about the details, his fame as a chief creator of the science of the cyto-architectonics of the cortex is assured for all time; the practical usefulness of his principles is absolutely established. In comparative anatomy their usefulness for ascertaining homologies in different animals needs no further indication here. For anthropology his work opens a great vista: he himself, only a few days before his death, was working on Herero brains. The promise that it offers for neurology is obvious; his last published paper, for example, dealt with individual variations of the visual cortex and their clinical significance in cases of bullet-wound of the occiput. The promise for psychiatry is equally great, not only in the way of correlation of particular disease forms with particular distributions of cortical lesions, but in reference to arrests of cortical development and the persistence of foetal stages in lamination.

SYDNEY J. COLE.

NOTICES OF MEETINGS.

Annual General Meeting.—(Provisional), July 13th, 1921, London.

Quarterly Meetings.—February 24th, 1921; May 26th, 1921.

South-Western Division.—April 24th, 1921.

Northern and Midland Division.—April 21st, 1921, Gateshead Mental Hospital, Stannington.

APPOINTMENTS.

WALKERS, ENID M., M.B., B.S.Lond., Assistant Medical Officer, Dorset County Mental Hospital, Dorchester.

WILSON, A. C., M.R.C.S., L.R.C.P.Lond., Senior Assistant Medical Officer to Peckham House.

NOTICE TO CONTRIBUTORS.

N.B.—The Editors will be glad to receive contributions of interest, clinical records, etc., from members (whether these have been read at meetings or not) for publication in the Journal. They will also feel obliged if contributors will send in their papers at as early a date as possible in each quarter.

Writers are reminded that, according to LIX(a) of the Articles of Association, "all papers read at the Annual, General, or Divisional Meetings of the Association shall be the property of the Association, unless the author shall have previously obtained the written consent of the Editors to the contrary."

Papers read at Association Meetings should not, therefore, be published in other Journals without such sanction having been previously granted.

THE JOURNAL OF MENTAL SCIENCE

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No. 277 [NEW SERIES
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APRIL, 1921.

VOL. LXVII.

Part I.—Original Articles.

Temperament. By HENRY RAYNER.

TEMPERAMENT, derived from "*tempero*," owed its meaning to the supposed mingling of the "humours," the sanguineous, the bilious, the phlegmatic and the melancholic, the predominance of any one of these in an individual giving rise to the characters of the corresponding temperament.

In current English the word is used to indicate indefinite qualities and characteristics, such as the "artistic," having no relation to the original signification. The inheritance of defective self-control of temper has been described as temperament.

In mediæval English the word "humour" was employed in the sense of temperament, and was perverted to an even greater extent, being applied to oddities, whims, tricks, aptitudes, apings, and ultimately to almost anything. Shakespeare ridiculed this abuse of the word by making Corporal Nym use it in many meaningless ways, such as "I love not the humour of bread and cheese, and that's the humour of it."

Temperament held such an important position in medical literature from Galen down to comparatively recent times, that the neglect into which it has fallen cannot but excite astonishment. So great is the medical desuetude that in *Allbutt's System of Medicine* the word "temperament" does not occur in the index, and in the latest *Cyclopædia of Medicine* the subject receives attention to the extent of eight lines only. The *Encyclopædia Britannica* gives it no separate heading. The *Index Medicus* in recent years often contains no references, and the few that occur are usually relative to the "artistic" and similar so-called temperaments having no connection with the subject.

The Catalogue of the Surgeon-General at Washington, however,

contains several columns of books on temperaments, chiefly of remote dates, the most recent being that of Stewart, published in 1886.

This medical neglect of temperaments after so many centuries of prominence is not easy to explain. They have certainly not ceased to exist, for they have received considerable attention in other branches of science, as a brief review of the views of various writers will demonstrate.

Medico-psychologists, for example, have given some attention to the subject, but this is usually confined to a description, without any attempt at practical application in treatment or prognosis. Maudsley, in writing of temperament and idiosyncrasy, says: "Unfortunately these big words are at present little better than cloaks to ignorance; they are symbols representing unknown quantities rather than words denoting definite conditions." He continues: "No more useful work could be undertaken in psychology than a patient and scientific study of individuals—the scientific and accurate classification of the minds and characters of particular men in connection with their features and habits of body. How vast a service it would indeed be to have set forth in formal exposition the steps of the quick process by which the shrewd and experienced man of the world intuitively judges the characters of those he has to do with, and refers them in a moment, instinctively, to their proper classes in his mind."

Richerand also writes: "I have no doubt that the influence of the physical organisation on the intellectual faculties is so decided that we may regard as possible the solution of the following problem. The physical man being given, to determine the character, the extent of his capacity and to assign consequently not only the talents he possesses, but those he would be capable of acquiring."

This demand certainly exceeds all that could result from a complete study of temperaments, for he includes innate endowment and education as well as character. These quotations show that serious thinkers recognise that considerable possibilities might result from a better understanding of the subject.

Psychologists have given an immense extension to temperament. Dr. Ludwig Georg (*Lehrbuch d. Psychologie*, Berlin) ascribes it "to the nature of the internal relation which exists between perception and the affections of the mind." It is not easy to understand how this description meets all the demands that he puts on it. He asserts that nations are distinguished by temperament, *e.g.*, the French are sanguine, the English melancholic, the Spanish choleric, and the German phlegmatic. Still further, the Caucasian is sanguine, the Mongolian melancholic, the Negro phlegmatic, and the Malayan choleric.

He even describes the four periods of life as being characterised by the four temperaments and extends them to the animal kingdom generally.

Wundt agrees with Georg in recognising temperaments in orders, families, and species of animals as well as in human races and nations. He gives prominence to the emotional characteristics.

Lotze's conception of temperament is connected with the differences of excitability for external impressions, the excitability and variability of ideas, and the strength of their association with pleasure and pain. He therefore bases temperaments largely on the mental characteristics, together with nervous reaction.

Comte dwelt specially on the psychical activity as shown in the habitual predominance of thought, feeling, or action in the individual.

Perez made movements the distinctive evidence of temperament, as these were lively, eager, or slow, thus making the motor reflex to stimulation the basis of his views.

Ladd points out the incongruities of these psychologic views and the difficulty of reconciling them. He adds that "of the exact nature of the physical basis of temperament nothing is known." He draws attention to the generally recognised fact that the abnormal bodily conditions of certain diseases produce alteration of personal characteristics resembling temperament, and that this seems to indicate that the "original constitution of the brain" is not the principal determining factor. He concludes that "the habitual condition of the internal and visceral organs and the colouring they impart to common feeling seem to be of prime importance in determining temperament."

The current view of the basis of temperament throughout the ages has obviously varied with the prevailing physiological and pathological theories, from the "humoral" period to the apotheosis of the brain cell of the present day. Hence it is not surprising that Sir Robert Armstrong-Jones, one of the most recent and able writers on the subject, asserts that temperament originates in the "master structure of the brain"—presumably the cortex cerebri.

The latest psychological writer on temperaments (James Ward, in *Psychological Principles*, 1918) says "that when we talk of a man's moods we are talking of concrete facts; when we talk of his temperament we are using a vague and rather empty generalisation." He suggests that they may be interpreted in the light of *cœnæsthesia* as determined by physical circumstances or by health, or both, and restricted in their range by the constitution of the organism itself. He is inclined to place temperaments in the "Anlage" of the brain, putting them almost on the level of sex. He would seem to admit that they are dependent finally on the physical constitution of the organism.

These widely varying views of temperament differ not only in the mental, emotional, and neurotic bases that they ascribe to temperament, but also by including the results of education and experience in the form of character, which are not temperamental.

Definition.—The need of some agreement in regard to the meaning of the word is obvious when such learned authorities differ so widely in their interpretation.

Definitions of temperament are comparatively rare in the literature of the subject, but the most satisfactory are those of two of the clearest thinkers of recent times—Dr. Laycock and Jonathan Hutchinson.

Dr. Laycock defined temperament as “the fundamental modes of vital activity peculiar to the individual,” and Hutchinson, in his *Pedigree of Disease*, described it as “the sum of the physical peculiarities of an individual, exclusive of all tendencies to disease,” and he elsewhere adds “that it concerns the original inherited organisation of the individual,” and does not include anything which is the result of the influences to which life has exposed him.

The use of the word “peculiar” is unsatisfactory when applied to characteristics common to the large classes of individuals manifesting a temperament, and “physical peculiarities” is misleading, since it might be made to apply to hare-lip and similar defects and deformities.

Exception may also be taken to “inherited organisation,” which might be read to imply that temperament was always inherited, which is certainly not the case, since the children of parents with marked temperament may be of neutral temperament, and on the other hand, parents of neutral may produce children of marked temperament, and children possessing two or three different temperaments may be born to the same parents.

These definitions may be re-phrased as meaning that “temperament is the normal fundamental mode of vital activity of an individual, in nutrition and function, as manifested at birth, quite apart from all post-natal influences, and not necessarily due to inheritance.”

This definition excludes—

(1) Tendencies to special nutritional disorders, *i.e.* diatheses, such as gout, rheumatism, etc.

(2) Innate tendencies to functional disorders such as neuroses and psychoses.

(3) Capabilities or aptitudes such as an ear for music, an eye for colour or form, or a turn for mathematics. These are not temperamental, since they may occur with any temperament, are certainly innate, and are probably dependent on brain structure, showing themselves as the sensory and mental development of the individual advances.

(4) “Moods,” the daily and hourly variations of “how we feel” due to the temporary changes of the *cœnæsthesia* from the circumstances of the hour, are also excluded by this definition of temperament. These occur in persons of all temperaments and are closely allied to temperament, so much so that within the limits of normality they might be described as “temporary” temperaments, but they must be

distinguished from "moodinesses" often classed with them, which are of abnormal origin, being due to disorder of some special organ—the brain, liver, stomach, heart, etc.—or to mental habit and not to the *cœnæsthesia* of the hour.

(5) Peculiarities of reaction—

(a) To special substances, as seen in anaphylaxis, idiosyncrasy, intolerance and tolerance of drugs, etc.

(b) To sensory and mental stimuli (antipathies), as to the sight of an animal or thing, particular sounds, certain odours or tastes, or to certain sensations of touch. It is necessary to distinguish true antipathy in taste from idiosyncrasies, sometimes described as antipathies. In the latter certain articles of food, even if eaten unknowingly, produce very violent nutritional disturbance, in the former, although the taste is most antipathetic, yet if the food is taken unknowingly there is no special result.

(6) Character is excluded, although a large number of writers make the mistake of including it. Temperament and character are in many cases in opposition, and indeed may be said to be always antagonistic. Education, training and experience, which go to the formation of character, gradually overcome the too easily excited reactions of the sanguine or quicken the tardy reactivity of the phlegmatic.

(7) The most important exclusion, the melancholic diathesis, requires some special mention, since it was described as a temperament depending on the secretion of black bile by the spleen, but after the discovery of this error its place has been taken by the nervous diathesis. This has been very variously described so as to appear as a mingling of the true melancholic with the "insane" and the "nervous" diathesis. The insane diathesis I have described in Hack Tuke's *Dictionary of Psychological Medicine*, and the true nervous diathesis appears to me to still await accurate definition and description, possibly in one or more divisions.

Persons of the melancholic diathesis are slightly built though often above the average height, their foreheads often high but narrow rather than broad; they are usually darkly pigmented in hair, eyes and skin, the hair being fine and plentiful but not curling, tending early to grey-ness; the teeth also usually tend to early decay. They are usually thin, even, as Clouston observed, at periods of life when it is physiological to be fat. Their dentition and other developmental growth is apt to be irregular. Their reaction to stimuli is rapid and they are usually active and restless. Their mental activity is great and often carried to exhaustion, so that periods of rest follow, often with emotional depression.

When these alternations of activity and depression are extreme in men of considerable talent it not infrequently becomes actual melancholia.

From the slowness of their build it has been suggested that their chylo-poietic viscera were of defective development. Whether this is so or not, they often suffer from defective digestion and its consequences. It has often appeared to me that their assimilative powers were unequal to meet the great demands of their physical or mental activities. Other members of their family often suffer from tuberculosis—an evidence of defective powers of resistance, which also might be ascribed to assimilative defect.

(8) Idiosyncrasy has always been regarded as so closely allied to temperament that a more special mention may be made of it without making too wide a digression. The recent studies of anaphylaxis appear to solve satisfactorily the problems of idiosyncrasy, which to Maudsley and others were still enigmas.

Anaphylaxis is induced by the injection of a definitive albuminoid (colloid) into an animal (alimentary ingestion is also possible), and after the lapse of a definite period the repetition of the injection produces a greatly increased intensity of reaction, the symptoms of the reaction being those of an acute intoxication of the nervous system. The '000001 part of a gramme of the albuminoid may induce this reaction. This state may persist for years and may even be transmitted to offspring.

Dale states that the blood of animals which have been given an antigen contains at the same moment a special toxigen and a special antitoxin, both furnished by the reaction of the cells of the organism, but Bayliss (1918) says: "The explanation appears to be in a colloidal precipitation process at the surface of the sensitive cells, by which their semipermeability is more or less destroyed."

The idiosyncratic reaction to infinitesimal quantities of certain substances, also usually of an albuminoid nature, is almost certainly of the same nature, and due to similar conditions of the body-cells as exist in anaphylaxis. The violent disturbance produced by minute quantities of honey, ginger, etc., is probably due to these containing some such albuminoid matter, and it is a question whether the similar severe effects of some odours, such as musk and ambergris, may not have a similar origin. The inability of some persons to eat certain articles of food, usually of an albuminoid nature, such as mutton, pork, eggs, etc., is a phenomenon of the same nature. As all these peculiarities usually date from childhood, it is probable that they may have been in many cases acquired *in utero* from toxic conditions of the mother's blood produced by such articles of diet, although they may be acquired later in life.

(9) The intolerance of many drugs, such as quinine, nux vomica, arsenic, and a host of others, is found in very varying degrees, and even in these the reaction is probably due to a change in the body-cells of a character related to the anaphylactic.

The tolerance of drugs is probably a form of phylaxis.

"Antipathies," often described as idiosyncrasies, are, however, in some cases almost certainly of mental or emotional origin, probably associated with some remote fear. James I's dislike of a drawn sword, the fainting of Tycho Brahe at sight of a fox, of Henry III of France at sight of a cat, and of Marshal D'Albert on seeing a pig, are probably of this kind. Others arise from sensations of smell, as seen in persons affected by the presence of a cat or other animal. Taste antipathies can usually be traced to some special disagreeable experience. The common sensation antipathies are most usually due to the touch of smooth surfaces, and when not acquired by association with the touch of reptiles might be possibly related to the instinctive loathing of reptiles common to man and all anthropoids.

THE DIVISIONS OF TEMPERAMENT.

Varieties of temperament were fully recognised by Hippocrates, and these he based almost entirely on physical qualities and external appearances. Galen described nine varieties: four simple—the dry, the moist, the hot, the cold—and four mixed—the hot and moist, the cold and dry, the cold and moist, and the hot and dry—with a ninth, the balanced, in which no quality was in excess.

The humoral pathology, however, furnished the basis of the four divisions that have persisted down to the present day, the predominance of the humour formed by the heart and blood producing the sanguine; that of the liver and bile, the bilious or choleric; humours of the brain, pituitary body and phlegm producing the phlegmatic; and lastly, that of the spleen (which was supposed to secrete black bile), yielding the melancholic.

The recognition of the fact that the spleen did not secrete black bile led to the omission, by many writers, of the melancholic, the term "nervous" or "neurotic" being substituted, as already mentioned.

The description of the melancholic temperament by different authorities varies so widely, and the tendencies to mental and nervous diseases are so emphasised, that it would seem to be more appropriate to describe it as a diathesis, and that they should be excluded from the considerations of temperament on the ground that they have definite tendencies to disease.

The naming of the choleric temperament is unfortunate, since "choleric" in ordinary speech has come to mean passionate, and this is not a predominant character of this division. It would be much better to term it the "sthenic." This would prevent the erroneous description of persons abnormally passionate from being included in this division.

PHYSICAL CHARACTERS.

Following the views of Hippocrates, it appears right to consider in the first place the physical characteristics of the three temperaments, in

regard to which there can be no doubt. These are, for the most part, observable at birth, and are related to the nutrition and growth of the individual.

	SANGUINE.	STHENIC.	PHLEGMATIC.
Bones . . .	Slight, tending to length.	Strong, of medium length.	Large, coarse.
Body . . .	Well proportioned.	Strongly built.	Ungainly, bulky.
Forehead . .	Narrow and high.	Wide and full.	Irregular.
Features . .	Well formed.	Strongly marked.	Not well formed, coarse.
Skin . . .	Fine, soft, and thin.	Rough and thick.	Coarse.
Hair . . .	Fine, long, wavy, not excessive.	Thick, strong, curly, plentiful.	Coarse, straight, sparsely set.
Pigment . .	Bright colouring.	Dark and strong.	Dull, not marked.
Eyes . . .	Blue.	Dark.	Light coloured.
Complexion .	Bright, quickly varying.	Dark, fixed, slowly changing.	Muddy, dull, and little variation.
Circulation .	Quick, excitable.	Steady, not easily excited.	Slow, lethargic.
Nerve reaction	Brisk.	Medium.	Slow.

The majority of these characteristics are present at birth. It is noticeable that fair hair often becomes dark later in life: this is somewhat contrary to Jonathan Hutchinson's view that "pigmentation was the only reliable characteristic in temperaments." After birth developmental processes are precocious in the sanguine, average in the sthenic (choleric), and backward in the phlegmatic.

Temperament, as already stated, is often inherited, but it is not uncommon to observe two or three in the same family, and even other members in whom there is no distinct temperament. They certainly do not follow the Mendelian law of heredity. As already stated temperaments alter as a result of age and disease. Hutchinson remarked on the comparative rarity of marked temperaments, but he must have been speaking of adults only, for a visit to any place in which very young children are congregated would refute this observation. Yet his observation tends to prove that temperaments become less marked with advancing age in many cases.

MENTAL AND EMOTIONAL CHARACTERISTICS.

The mental and emotional characteristics came into play in correspondence with the post-natal development of the brain. Willoughby (Tuke's *Dict. Psych. Med.*) has described them as being, in the sanguine, great susceptibility to external impressions and to the feelings of pleasure and pain attached to these impressions: their mental movements are rapid and shallow; they are impulsive, emotional and

excitable, easily provoked but as easily forgetting. They lack persistence and have bad memories. They have often powerful imaginations and clever thoughts and are open-minded to new ideas.

Of the sthenic (choleric) he writes : "Mentally they are capable of great exertion ; they are not impulsive, but steady in thought and judgment ; memory good, speech deliberate but decided, they make up their minds about anything and stick to it. They are passionate and jealous, and do not forget an injury ; their feelings are not easily excited but are strong when roused ; affections strong."

Of the phlegmatic he writes : "Individuals of this temperament have good judgement but are slow ; common sense fairly good, and memory good ; not emotional ; heavy and plodding ; feelings persistent, though powerful, much lack of energy."

This description of the temperaments is not the best that could be made, but is sufficiently clear, and not being made by a man holding any strong views of the basis of temperament, may be held to be free from any theoretic prejudice.

THE PHYSICAL BASIS OF TEMPERAMENT.

The physical basis of temperament has been ascribed not only to the humours but to almost every organ and tissue of the body. To consider these varying views in the order in which they have been propounded would be a voluminous task, and the more direct way of arriving at a conclusion is by considering each organ in the order of its importance, and by the process of exclusion arriving at a definite opinion.

The latest views already alluded to, those of Dr. James Ward and Sir R. Armstrong-Jones, make the grey matter of the *cortex cerebri* the site of the organic origin of temperament. This part of the brain at birth is not developed as a fully functioning organism, whereas temperament is fully evolved in its physical aspects, and to attribute temperament to this part of the brain would appear to be equivalent to endowing this structure with a creative power, antecedent to its development as a functioning organ. The most devoted worshipper of the brain-cell will not claim for it such a marvellous power.

The sensory areas of the brain must be excluded for the same reason, since sight, hearing, taste, and smell are certainly not in active functioning before birth. The motor areas must also be excluded, foetal movements not being due to sense-perception, Baillarger having shown that they exist in anencephalic foetuses and persist after craniectomy, being therefore of spinal origin.

Descending still lower in the nervous system it is obvious that the basis cannot be in the respiratory area, which also does not function

until birth, or in the heat centre, which is not fully active until a little later.

The vaso-motor apparatus is, however, in full activity before birth, and its function plays a prominent part in the characteristics of temperament. The history of the embryonic development of the vascular system, together with observations on the normal and pathological conditions during foetal life, prove that the activity of this nervous mechanism has been independent of cerebral control. The vaso-motor apparatus is almost certainly dependent in later life on the stimulation received from the internal secreting glands (thyroid, pituitary, etc.) for its functional habits, and it is therefore presumable that in foetal life its activity is similarly due to stimulation derived through the maternal or foetal blood. This throws doubt on the vaso-motor apparatus taking an active part in the origination of temperament, however important may be the rôle it plays in the manifestations thereof.

The internal secreting glands, by whose activity the function of the vaso-motor is controlled, are probably in their turn dependent for their stimulation on the products of the body-cells. Each cell of the organism, according to conclusions long since arrived at by Brown-Sequard and d'Arsonval, secretes special products and ferments that are poured into the blood, and through that medium influences all the other cells of the organism, thus consolidating them together, quite apart from any action of the nervous system. These views have received strong support from recent observations. The interstitial tissues of the ovary and testis, for example, have been shown to be the source of the sexual hormone, which, quite independently of the nervous system, is the cause of such extensive and varied processes of special nutrition. The investigations of Bayliss and others in regard to secretin in particular, and to hormosomes in general, fully demonstrate the important part played by the body-cells in regard to the endocrine secretions.

This is still further exemplified by the conclusions of Jacques Loeb (the organism as a whole) that the heredity of a genus is determined by "cell" proteins of a definite constitution which differ from those of other genera, and that the different species of the genus have all the same genus proteins. Each species of the same genus has, moreover, proteins differing in chemical constitution which give rise to biologic or immunity reactions of a specific character. This genus and species heredity he traces to the "cytoplasm" of the egg.

Mendelian characters are ascribed to the "chromosomes" of the nucleus of the egg and the head of the sperm, and are determined by hormones that need be neither proteins nor specific, or by enzymes which also need not be specific to the genus or species, all these variations being traced to the original endowment of the body-cells.

Temperamental characters differ widely from the Mendelian in many

important respects, although they approach it in affecting growth and pigmentation. The main difference is in regard to heredity, which has such undeviating laws in Mendelism, and is of a most uncertain nature in temperaments. In the latter in many cases, as already stated, the temperament is not transmitted, and in others all three temperaments may be seen in the same family as well as the absence of marked temperament. If there is any tendency for temperament to follow the Mendelian heredity laws, it is certainly very faint. The fact that temperaments vary from age, disease and other conditions also tends to show that they are dependent on a much less definite organic basis than that assigned to the Mendelian.

As temperament is fully developed at birth, often varying from the parental characters, this variation must almost certainly be due to maternal conditions during gestation.

The intimate nutritional relations between the mother and the foetus need no emphasising. The blood-vessels of the ovum are functionally active in the splanchnic mesoblastic area on the wall of the yolk-sac outside the embryo before the latter is folded off from the ovum, and the whole of the nutrition and growth of the foetus is dependent on them. The activity of the foetal circulation is so closely correlated with the maternal that any change in the latter must be accompanied by a corresponding change in the former. The mother's habits of nutrition must necessarily be impressed on the foetus, and it is not unreasonable to suppose that these habits should be carried on by the somatic elements of the child after birth. Hence it must appear probable that if the nutritional conditions of the mother throughout gestation were unusually asthenic, exceptionally active or unduly sluggish, these conditions might be impressed on the body-cells of the infant through the varying maternal endocrine secretions, resulting in a corresponding habit of nutrition or temperament. If the maternal conditions were sufficiently marked, it is possible that they might override other temperamental predispositions. I believe that I have observed such results in a few gestations, but it is necessary that extensive observations should be made, in order to confirm or refute this theory.

It is not a very large demand on the facts advanced to suppose that the long and intimate relation between the mother and foetus should impress such characters on the somatic elements of the latter.

The fact that important changes, often of a very enduring nature, are produced in the somatic cells in anaphylaxis and similar allied conditions makes this origin of temperament probable and understandable.

The importance of temperament, when markedly present, in the treatment and prognosis of disease is obvious, and is worthy of more consideration than is given it at present. In education, too, it should receive considerable attention, and it should not be without weight in

deciding the life-work of the individual. To the employer of men in various capacities it should have a certain value, as suggested by Maudsley.

CONCLUSIONS.

The conclusions to be drawn from the facts advanced are that temperaments are not dependent on the organisation of the brain or nervous system, or even of its autonomic portion, nor on the endocrine glands, but are due to the somatic elements. That these somatic characters are not so organic as to be inevitably inherited, but are modifiable by protracted variations of nutrition within the limits of normality either during gestation or in after-life, and probably also even under certain conditions of disease.

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The Influence of Song on Mind and Body. An Address ⁽¹⁾ given to the Vocal Therapy Society at Lady St. Helier's. By Sir FREDERICK MOTT, K.B.E., M.D., LL.D., F.R.S.

It is now two years since Armistice Day, and I then delivered a short address on vocal therapy and the manner in which it originated at the Maudsley Hospital in small beginnings. It was then energetically supported by Lady Carnarvon, and a society was founded for the purpose of providing teachers for instruction of soldiers and ex-service

⁽¹⁾ Inasmuch as orchestral and vocal music form an important adjunct to treatment in mental hospitals, I ventured to ask the Editors if they would care to publish it in the *Journal of Mental Science*, for although of a popular scientific character it might prove of interest to many of its readers.

[We gladly publish this address, not only for its literary charm and scientific merit, but because it will assist the public and public authorities more thoroughly to appreciate that music in mental hospitals is not merely "to pass the time" or a form of "kindness to patients," but a valuable adjunct to psychic treatment meriting every encouragement and adequate expenditure.—EDS.]

men in breathing and singing, as well as in the treatment of speech disabilities, under medical direction and supervision. I was fortunate in securing such excellent teachers as Miss Oswald, Miss Bush and Miss Dredge, who, with genuine enthusiasm, successively carried out vocal therapy at the Maudsley Hospital.

Lady Carnarvon asked me if I would (at this third Annual Meeting) deal with the subject of vocal therapy from a popular psychological point of view. I agreed, but I felt that although my remarks would treat mainly of the mental aspect of vocal therapy, I should expand the title to "The Influence of Song on Mind and Body," for in my opinion the two are indissoluble. There can be no mind without memory and no memory without body ; moreover, the furniture of the mind consists of past experiences and the bonds that unite them. The Great War has shown the extraordinary influence of the mind on the body when it has been affected by experiences causing contemplative fear, resulting in conversion hysteria in the form of various paralyses, mutism, blindness, deafness, etc., but in this address I intend to explain the psychic mechanism of the voice in relation to the emotions.

MUSICAL MEMORY.

Quite early in the war two cases of true shell-shock amnesia, with complete anterograde and retrograde loss of memory, came under my notice which showed that musical memory usually returns earlier than other forms of memory, or rather the power of recollecting past experiences. I found that these two soldiers suffering with shock, one of whom had been a singer and the other a piano-player, were able to remember and to sing songs or play pieces they had learnt on the piano prior to the shock, and yet were unable to remember experiences connected with their daily avocations and home surroundings.

Again, there were cases of men who were mute from the same cause who suddenly regained their speech at a concert by joining in the chorus of some well-known song.

Moreover, a fact well known before the war, and emphasised by numbers of soldiers and ex-service men afflicted with stammering and stuttering, is that people who suffer with these speech disabilities are able to sing a song without their diction showing this defect.

Now, of all the arts music appeals most to the emotions ; and probably the reason why countless men and women who are illiterate and uneducated can recall the words of songs and hymns when they hear the first bar of the musical setting, is that words associated with music are more stably organised in the mind, owing to the musical origin of language. There are, broadly speaking, two psychological laws of association in memory, *viz.*, association by contiguity and association by similarity.

ASSOCIATION BY CONTIGUITY.

In singing a song there is contiguous association of musical cadence and articulate speech. We shall see that there is reason to suppose that the utterance of vocal inarticulate sounds of varying pitch is, evolutionally speaking, much older than articulate speech, and that whereas the production of such sounds can be initiated in both halves of the brain, articulate language in right-handed persons can only be initiated in the left half of the brain, which controls voluntary movements of the right half of the body—a fact that proves that expression of our thoughts by graphic symbols made with the right hand has grown up and progressed simultaneously with language spoken by means of auditory symbols. Song has been defined by Grove as a short metrical composition whose meaning is conveyed by the combined force of words and melody. The two are organised in the mind simultaneously and each reinforces the other in memory.

The following is a very instructive case considered in relation to the psychological association by which words are revived (in a case of aphasia) by melody. A soldier came under my care who suffered with aphasia and paralysis of the right side of the body in consequence of a gunshot wound of the brain.

The bullet entered the left side of the head and passed through the left fronto-central region of the brain, damaging the motor speech centre, probably together with its connections with the auditory word centre, and through the right orbit, destroying the eye; in its passage also it must have cut through the left optic nerve or tract, for he was totally blind. This poor fellow was very cheerful and comprehended all that was said to him; thus, by feeling my tunic sleeve he recognised my rank, for when asked if I was a captain he expressed negation by "Oot," meaning "No," and major by "Ah," which was correct at that time. He obeyed all commands. Now, curiously enough, although he was able to express judgments only by "Ah" and "Oot," which corresponded to "Yes" and "No," he was able to sing several songs through without difficulty, provided the first word or bar of music was given. Thus, I stood beside him and hummed, "'Tis a long, long way," and immediately he started the well-known chorus of "Tipperary," winding up with "Are we downhearted? No!" I then said, "Say Tipperary, Tom." He replied, "Oot," and he was unable to utter any of the words. It must be concluded either that the song had been repeated so often as to have become organised in both halves of his brain or in subcortical lower centres. We know also that in amnesia (loss of memory) rhymes are recalled very easily, especially if they have been learnt in early life. A month later, when I saw him, he was able to walk and speak. Thus, given half-a-crown, he felt it, then tried the rim for milling with his teeth, and said, "Two-shilling-bit." Then asked again he corrected it with "Half-crown." Given a penny he tested it in the same way, and the unpleasant taste left in his mouth caused him to throw it down with all the signs of disgust, saying, at the same time, "Copper."

ASSOCIATION BY SIMILARITY OF SOUND.

Association by similarity is illustrated in rhymes which are easily remembered by similarity of sound. Popular metaphor speaks of "Rhyme without reason," for the association is superficial and does not imply deliberation and judgment; it is the first to come in mental

evolution and the last to go in mental decay. An interesting example of this was afforded in the case of a woman suffering with alcoholic dementia who had complete loss of memory for recent events and mental confusion. I told her that the name of the superintendent of the asylum was Dr. Jones. She immediately added: "Broke his bones, falling over cherry stones." A few minutes later I asked her the name of the superintendent and she had quite forgotten. But when I mentioned "Cherry stones" she replied: "Oh, Dr. Jones," and the rest of the rhyme was repeated.

THEORIES OF THE ORIGIN OF MUSIC AND LANGUAGE.

Herbert Spencer, in an essay on the origin and function of music, on the one hand came to the conclusion, like Diderot, that the cadences used in emotional speech afford the foundation from which music has been developed; on the other hand, Darwin concluded that musical notes and rhythm were first acquired by the male and female progenitors of mankind for the sake of charming the opposite sex. Thus, as he says, musical notes became firmly associated with some of the strongest passions and are consequently used instinctively, or through association, when strong emotions are to be expressed in speech. This explanation is certainly true, but it does not cover completely the origin of speech, for the language of the emotions, which is a universal mode of expression of feeling, is based upon the expression of the desires and the satisfaction and attainment of ends ministering to the three primal instincts—the preservation of the individual, preservation of the species, and the herd instinct. This language of the emotions and passions is accomplished by gestures and facial expressions accompanied by modulated inarticulate cries of varied pitch and loudness. Darwin gives many instances of birds and animals that flock together giving warning signals to their flock or herd of approaching danger. Again, the cry of the young animal for its mother and the answer show that variations of pitch in the cry are employed as a means of preservation of the individual, a cry for help or food. Experience shows also that there is an individuality of the cry of the offspring and reply of the mother in a flock or herd—a cry of recognition.

It is more probable that an inarticulate language of emotion preceded articulate language, and being much older evolutionally, is consequently dependent upon a more stable preorganised mechanism, represented in both halves of the brain. Indeed, whereas stimulation of the laryngeal centre excites movement of both vocal cords, stimulation of the tongue centre excites only the muscles of the opposite half of the tongue. The conscious movement of the jaw, the tongue and the lips, the articulatory mechanism of speech, are under the direct control of the will. The movements of the muscles controlling the tension of the vocal cords

are unconscious and are not under the control of the will, but are directed solely by the sense of hearing, which is the primary incitation to phonation. But phonation is essential for articulate speech, therefore hearing is the primary incitation to articulate speech. A child that has acquired speech at two or three years of age, who subsequently becomes stone deaf from middle-ear disease, later in life loses the power of articulate speech. Mutes, when once they are made to phonate, recover their speech, generally almost immediately. My experience, in a large number of cases of hysterical mutism in soldiers, was that as soon as ever they could be made by suggestion or Faradism of the larynx to cough with tone, showing the vocal cords were approximated, speech returned and they were cured. The functional dissociation of the bilateral cortical phonating mechanism had been overcome by this instinctive act of coughing.

SIMILARITY OF EMOTIONAL LANGUAGE IN DIFFERENT RACES.

There is a close similarity of emotional language between the men of all races, past and present. The same emotion, sentiment or passion, *e.g.*, love, jealousy, hatred, vengeance, horror, pity, etc., generally speaking, excites in all similar gestures, similar expression in the features and similar vocalisation and inarticulate cries.

When speech is associated with strong feeling, or an emotion or passion is simulated by the actor or orator, the voice is modulated accordingly in loudness and pitch. The expression of feeling vocalisation is instinctive in the human being as it is in the animal. The growl of the dog is a sign of rising anger and of warning. The vocal expression of anger is to growl; and a curse is usually muttered between the set teeth and is always of a low pitch. But anger beginning in a low tone may end in high-pitched screams. The language of the emotions is, therefore, a universal language; it reveals more truthfully the inmost thoughts and feelings of mankind than articulate language, which is so often employed, as Tallyrand said, "to hide men's thoughts."

In ordinary conversation the medium tones of the vocal register are employed. "The emphatic syllable, however, in a sentence, or that which most strongly expresses the emotional comment on the proposition, is indicated by either the lowest or highest tone of the cadence. And it is interesting to note that it is the oppositeness of choice in this respect that causes the most marked contrast in the Scotch and the English. In English we ascend to the emphatic syllable, but in Scotch we just descend to the emphatic syllable" (Herbert Spencer).

MUSIC AND THE EMOTIONS.

Music arouses in us various emotions, but according to Darwin not the terrible ones of horror, terror and rage. We can see the importance

of this fact in the treatment of battle-worn soldiers with terrifying dreams of war by song, which awakens the opposite emotions, such as love, mirth, courage and a *joie de vivre*. Again, music tends to excite rhythmic movements of dancing or marching according to the character of the rhythm. It is an established fact that a band helps greatly in the attack or retreat of a regiment, and songs of soldiers on the march tend to relieve the mind of anxiety and banish the sense of fatigue. Cromwell's invincible Ironsides went into battle singing hymns.

Music reacts not only on the individual but on the collective or group mind, and its beneficial effects in peace or war become contagious.

Mr. Francis Darwin, in his recent charming essays, tells a little story of the influence of music on our barbaric Saxon ancestors :

"A Saxon bishop in the seventh century at Sherborne, being unable to attract his congregation to the church, stood on the bridge and played the harp, and thus collected his people, to whom he preached."

A modern instance of the success of music in attracting people who would otherwise never attend any religious service is afforded by the stirring effect of the Salvation Army Band as it marches through towns and villages, thus collecting the people by its appeal to the emotions and its contagion of enthusiasm, vivifying a religion for those who would otherwise never have come under its influence. Again, history shows that a great patriotic song may have a pronounced vitalising effect on the future of a nation, best exemplified by the "Marseillaise," which has stirred the souls of millions to fight for victory and liberty. It is sad, but strange, that the great war has not produced in this country any great and noble song. Certainly the Hun produced a remarkable song, "The Hymn of Hate," which reflected the state of mind of the German people at the time.

ORIGIN OF SONG IN BRITAIN.

The history of song in Britain is of interest, for—

"Heroic ballads, song and other pieces of our English poets exhibit the customs and opinions of remote ages, of ages which have been almost lost to memory."—PERCY.

Records show that the Ancient Britons had great respect for their Bards; and no less respected were the Scalds by the Gothic nations. Moreover our Saxon ancestors, before the introduction of Christianity, as well as the Danes, held men of this profession in greatest reverence. Their skill was considered as something divine; their persons were deemed sacred; their attendance was solicited by kings and great nobles, and they were everywhere loaded with honours and rewards. When the Saxons were converted to Christianity, in proportion as letters prevailed among them owing to the influence of the monasteries, the Bards were less and less necessary as historians to sing the deeds and triumphs of kings and nations.

The Bards, therefore, exercised a very powerful influence upon the minds and conduct of the primitive Celtic races of Wales, Brittany and Ireland. As illustrating this may be mentioned the fact that in Wales

they formed an organised society with hereditary rights and privileges ; they were treated with great respect and were exempt from taxes and military service. Their musical poems and recitals were handed on from generation to generation solely by memorising, but doubtless each successive bard varied the words and music ; and the same applies to the later minstrels.

FOLK SONG.

Percy remarks how much richer in heroic ballads and songs are the northern counties than the southern. Possibly this may explain the greater appreciation of music and the finer choirs in the north. The folk-song of tradition is the work not of one age but of many, for the songs made by illiterate persons and passed on to others without the aid of printing and writing tended in the course of oral transmission and memorising to lose the traces of individual authority that they may once have possessed. Every country has its own store of folk-songs with national characteristics in idioms, melody and rhythm, distinguishing them from those of other countries.

Mr. Sharpe,⁽²⁾ the leading authority on folk-lore song, has lately visited the Appalachian Mountains, Virginia, U.S.A., inhabited by people of English origin who migrated there in the time of Queen Elizabeth. There are about three million people, isolated from the rest of the world, who have retained the ancient language and customs of the Elizabethan times ; they possess a wonderful store of folk songs, which they sing unaccompanied by any musical instrument. They sing these old folk-lore songs while at their work and play, and a large number of them have natural vocal powers of no mean order. The folk-lore songs have been handed down by memory from generation to generation. Naturally numerous slight individual variations have been made in the course of time both in melody, rhythm and words, some of which have been retained, others discarded, by a process of natural selection and survival of the fittest in an unspoiled simple community. This pure folk-lore song is therefore a *communal* and not an individual emotional expression of the mind, and in singing folk-lore song the professional artist is too apt to forget this fact, and while putting his own individuality into his rendering of the song he destroys its communal expression. Mr. Sharpe says the secret of folk-song production is perfect diction and idiom to which melody and rhythm is added ; it is the story contained in the folk-song even more than the musical cadence which carries conviction to the audience.

Mr. Baring Gould, Miss Lucy Broadwood, Mr. Keel and Mr. Somerville as well as Mr. Sharpe have collected and arranged many of our old country folk-songs transmitted from one generation to another

by memory. Most of these were obtained from *very old men*. Too often our folk-songs have been bowdlerized by hawkers, who, like Autolycus, visit the villages selling their goods, and hearing an old folk-song in the tavern they pick up a part of it, return to London and receive for it a few shillings from a cheap low-class publisher. The song is printed with others on a sheet constituting a "broadsheet," but too often it is not completely remembered and the gaps are filled up in a debased form. This printed debased form has largely displaced the old folk-song in England.

Song as a musical form falls into two groupings, the one folk-songs, the other art-songs. A line of demarcation between the two cannot be drawn, for there has been action and reaction between them since music began as a cultured art. But folk-song is the natural instinctive inspiration of the human mind, memorised and transmitted, from generation to generation; it constitutes a record of the habits, customs, traditions and aspirations of the common folk, and reflects the individual and collective mentality of the people towards life in all its emotional phases of love and despair, joy and sorrow, mirth and sadness, freedom and oppression, toil and play, victory and defeat.

SONG IN THE ELIZABETHAN PERIOD.

Previous to the Elizabethan period, when our great dramatists and poets blazoned forth, instrumental music as an accompaniment to vocal music both in folk-song and ballads was of the simplest kind. In most of the Shakespearian dramas, also in those of Ben Jonson and Marlowe, there are found stanzas, relics and allusions to these old ballads and poems. Thus—

" Sigh no more, lady,
Lady, sigh no more;
Men were deceivers ever;
One foot on sea, the other on shore,
To one thing constant never "

occurs in a very old ballad, "Holy Friar of Orders Grey"; and I could cite many other instances, *e.g.* :

Iago sings a whole stanza from an old Scottish ballad :

" Tak' thy auld cloak about thee."

Two stanzas from the Gravedigger's Song in "Hamlet" are from "The Aged Lover Renounceth Love."

In "Henry IV," Act ii, scene 4, Falstaff enters the tavern singing :

" When Arthur first in Court . . . and was a worthy king."

This is from an old ballad translated from *Morte D'Arthur* :

The Strolling Minstrels, in Elizabeth's time, had fallen into disrepute,

and were classed amongst vagabonds and vagrants, and liable to be imprisoned as such. An old ballad, "A Song of the Lute":

"When griping's griefs the heart would wounde,
And doleful dumps the mind oppress,
There Music with her silver sound
With spede is wont to send redress,
Of troubled minds for every sore
Sweet music hath a salve in store."

In "Romeo and Juliet" Shakespeare makes Mercutio ridicule "Music with her silver sound" as being more the sound of the silver which interested the musicians more than the music.

Doubtless Shakespeare knew that these old ballads were deeply impressed in the minds of the people, and that their introduction would add greatly to the popularity of his plays.

LYRIC SONG.

The polished products of culture and art in lyric song reached their zenith with Schubert, that great musical genius, who at eighteen wrote the "Erlkönig." It is remarkable enough that with little education and opportunity he should have composed such rare and beautiful music; but it is even more wonderful that he should have shown such insight into the emotions and passions of the poems to which he set the music. He composed his music to many of Heine's poems, which are very nearly impossible to translate, because the poem and the music are in perfect association and each supreme in expression of the emotions. In "Who is Sylvia?" the English words of Shakespeare are in perfect association with the musical cadence because there is the complete harmony and beauty of expression of the two great masters. Schubert had also that qualification which many song-writers do not possess, *viz.*, a knowledge of the human voice, its powers and limitations, which was partly intuitive, partly the result of his experience as a chorister.

Great musical geniuses, like great poets, are born, not made, and a perfect sense of musical cadence cannot be acquired by individuals possessing only an infinite capacity for taking pains.

As the expression of the emotions and passions by the appreciation and production of variations of pitch and rhythm in the human mind was probably the forerunner and origin of articulate language, music is therefore more stably organised in the brain and develops instinctively at an early age, and in some individuals to an extraordinary degree of perfection. Only in this way can we explain the number of extraordinary prodigies of musical genius, of whom Schubert, Mozart and Richard Strauss are outstanding examples. For the same reason an intuitive mode of expressing feelings and passions by modulation of

the voice is common to all human beings, and because instinctive, it is more truthful than is articulate speech.

THE QUALITY OF THE VOICE INHERITED.

The quality of the voice depends upon the shape and condition of the resonators, which add the overtones to the sound produced by the vibration of the vocal cords.

Now it is an interesting fact, pointed out by Francis Galton, that the quality of the voice depends upon inherited conditions, whereas articulate expression and handwriting do not ; these are acquired by imitation. When we consider that the physiognomical characters of an individual very largely depend upon the shape of the nose and nasal passages with the other hollow cavities in the mask of the face, which form (together with the mouth and throat) the resonators of the human voice, and give to it the peculiar personal qualities which distinguish it from other voices, it is easily understood that just as the features and neck of our ancestors may be handed down from generation to generation (*e.g.*, the Bourbon nose and the Hapsburg lip for 500 years), so the quality of the voice (which, as we have seen, is so intimately dependent upon structures which are associated with physiognomical characters) is handed on from generation to generation. This proves how true is the statement of the old Roman poet and philosopher, Lucretius: "Sometimes, too, the children may spring up like the grandfathers and often resemble the forms of their grandfathers' fathers, and repeat not only the features but the voice and hair of forefathers."

VOICE PRODUCTION IN SINGING AS A GENERAL HYGIENIC MEASURE.

The art of singing consists in the control of the breath and the proper management of its mode of escape through the glottis, mouth and nose.

The teaching of singing, by inculcating the habit of breathing through the nose and fully expanding the lungs, should therefore serve as a health restorative in convalescent lung cases, whether arising from disease or "gassing." Moreover, singing, by producing an individual and collective sense of joy and well-being, promotes digestion, assimilation and nutrition, thereby aiding convalescence of all forms of mental and bodily disease.

The nasal passages are so constructed as not only to serve the sense of smell but to warm and filter the inspired air. The nose thus acts as Nature's sentinel to the respiratory passages. Instruction in singing, by establishing a habit of breathing through the nose, serves therefore as a means of diminishing the liability to acute and chronic catarrhal affections of the bronchial tubes and lungs caused by the entrance of irritant particles, germs of disease and cold air.

"In sweet music is such art
Killing care and grief of heart,
Fall asleep or hearing die."

HENRY VIII, Act iii, Sc. 1.

Inasmuch as music is associated with pleasure and the nobler feelings and passions of love, tenderness, joy, mirth, the martial spirit and rhythmic dance, rather than with pain, fear, terror, grief, horror, anger and rage, it tends to initiate and energise the former and drive away the latter. These latter emotions and passions are associated with particular changes in the bodily state, *viz.*, the quickening or slowing of the pulse and respiration, the emotional thrill or shudder of the spine, pallor and coldness or redness and warmth of the skin, with dilatation of the pupils, etc. Not only are there these changes in personality of which we are conscious by bodily feelings, but associated therewith are subtle bio-chemical changes in the blood caused by an increased production and outpour of adrenalin, which plays an all-important part in the defensive mechanism of fright and fight.

SINGING FROM AN EDUCATIONAL STANDPOINT.

"Great is song used to great ends."—TENNYSON.

Although the greater number of disabled and invalid soldiers are not capable of doing more than sing in choruses and part songs, and the singing teacher (from a high artistic point of view) may find teaching them a humble occupation, yet according to my experience at the Maudsley Neurological Clearing Hospital, it will certainly not be a barren one, for it will bring joy into their lives and help them to forget the terrible experiences they have passed through. Moreover, it will fill their minds with a store of fine melodies. But among these soldiers the singing teacher will occasionally find good musicians and solo singers anxious to improve their voice production.

(²) At a meeting of the Society of English Singers, Mr. Sharpe gave a charming account of this visit and some of his experiences.

A Study of Hallucinations in a Case of Schizophrenia.(¹)

By HENRY DEVINE, M.D., F.R.C.P.

IN the latter part of 1919 a patient who had hitherto proved inaccessible began to speak freely of his hallucinatory experiences. His observations were so interesting that it seemed to be an excellent opportunity to gain some insight into the obscure question of hallucinations, and I have therefore kept a complete record of everything which the patient has told me in the course of our conversations during the

(¹) A paper read before the Section of Psychiatry, Royal Society of Medicine, on Tuesday, March 8th, 1921.

last year. The method of study has been purely conversational. The method of free association was not utilised for various reasons, and, in a sense, it was scarcely necessary since the patient really analysed himself naturally, and in his remarks made the origin of his experiences quite apparent. It is only proposed, in the present instance, to describe the hallucinations, and to discuss their origin and significance. There are many other features of interest in this case, such, for instance, as the reactions provoked by hallucinations, but these matters are much beyond the scope of a short paper. A brief history of the case will first be given.

In December, 1918, Mr. A—, a gentleman æt. 51, was lodging in an hotel at X. One morning, clothed only in his trousers, socks and vest, he emerged from his bedroom into the corridor, and, walking up to the chambermaid, he struck himself with his braces, and remarked in a loud voice, "Do you for Christ's sake see me knocking myself?" On account of this alarming and eccentric conduct the police were summoned, and as the gentleman was found to be insane, he was certified, and he thus came under my care. On admission he was quiet and composed, his chief eccentricity being the tendency to crawl under the other patients' beds. His explanation of such conduct was inadequate. He said he did it "for fun" because he did the same thing as a child. His mind was perfectly clear, however, and he revealed himself as a well-bred man of high intellectual attainments. He conversed about himself in a general way, but not intimately, and he denied hallucinations, though his whole attitude clearly indicated their presence. He talked vaguely and with reticence about "strengths," discussing various kinds of strength, supernatural and otherwise. He said, when questioned as to his history, that he was the youngest member of a large family and that there was a considerable gap in age between himself and his brothers and sisters. There had never been much sympathy between them; they had not understood him and had tended to domineer over him. There had been domestic inharmony and his father had eventually lived away from home. He had for a time been a medical student, but had not pursued his studies to their completion, and he had lived a wandering life on the continent, leading a somewhat precarious existence by teaching languages. He had spent a good deal of his invested capital and had often been in financial straits. At the time he was certified the patient was evidently in low water, as the hotel in which he was staying was of an inferior type.

For about a year his condition remained unchanged. His demeanour was one of excessive and stilted politeness. He would stand up if I entered the room, make way deferentially for me to pass, take off his hat if he should meet me in the garden, and always address me punctiliously as "Sir." The usual lack of emotional *rapprochement* between himself and the environment was present in a high degree. His attitude and expression were like a mask to conceal his thoughts and real feelings. His air of exaggerated humility was, however, in striking contrast to the expression of his eyes, which was indicative of a fierce and antagonistic attitude. His general appearance was, in fact, singularly like a Mephistopheles. His attitude reminded one of a prisoner, who, while outwardly displaying implicit obedience to authority, actually regarded his guardians with repulsion and hatred. His phrasing was stilted and precise, and the words of his sentences were carefully chosen. He exhibited various mannerisms and behaved eccentrically. He would bow to imaginary persons, place a cigarette on the ground and make a series of steps towards and away from it, lie on his face, kneel down, or gaze fixedly at the sky.

He gave trivial explanations for these actions. He would say, "It is necessary that a gentleman should take exercise," or that such actions were not hurtful to others and for that reason "could not reasonably be objected to by an authority." He afforded no opportunity to penetrate into his inner mental life, and he denied hallucinations in the manner peculiar to the schizophrenic.

In December, 1919, however, the patient said he wished to speak to me privately,

and he then opened up freely and told me those facts which it was interesting for me to know. His statement, in so far as it relates to the hallucinations, may be briefly outlined. In 1902, while reading in his lodgings in a continental town, he suddenly heard loud voices repeating the phrase "Bey, pay 600 pounds!" This, as I found out later, was a blackmailing threat, the "Bey" being a contraction of the word "Obey" which he used to his nurse when a child. These "voices" have been incessantly with him for 18 years holding him in conversation, and it was the fact that the constant attention which they exacted from him was beginning to "exhaust his brain" that led him to consult me. He said that he feared that if the annoyance continued he would *lose his reason*. On one occasion he complained to the police and was confined for a time in an asylum in Austria. At first he imagined the voices came from the next room to his, then he felt it must be a trick on the part of people in the street, and finding that this could not be the case, the possibility of hypnotism occurred to him; finally he realised that the experiences must be supernatural in origin and attributable to agencies which he describes under the heading of "Immortal Strengths." It is the activities of these "Strengths" which it is the purpose of the present paper to consider.

The problem of hallucinations may be approached at the outset by regarding them from the point of view of *mental dissociation*. This term does not imply the acceptance of any special theory to account for the occurrence of these phenomena; it is no more than a convenient way of expressing an actual fact. Certain mental processes occur which the individual does not recognise as his own. These processes come into consciousness unbidden, and the individual is unable to regulate or control them—they are dissociated from the main personality. In some cases hallucinations appear to consist of isolated, unsystematised, and fragmentary mental elements; in others they are highly organised into a system which produces a veritable duplication of the personality. The case of Mr. A— belongs to the latter category, and I have endeavoured by a careful study of all that the secondary personality said or did, or made Mr. A— do, to estimate its origin and significance.

In the first place it is to be observed that the "Strengths" are in no sense creative; they give Mr. A— no new information and reveal nothing, but they incessantly throw up the past and interfere with his every present thought and action. "He has gathered from my brain everything I have ever done or remembered," he says. "He tells me nothing but repeats what he gets from my brain. He is entirely engrossed in my thoughts—a listener informing himself of what I think. He reprimands me for all I have thought or done in a kind of parental authority. It is the rôle of the *elderly-father-bishop* rolling about in my brain. It is as if my childhood were a book. They tear out the pages, as it were, and accuse me of them all. He gets all these things from me; he weighs me down with my own knowledge." These phrases might seem to suggest that the "Strengths" are more or less beneficent in an interfering kind of way—a sort of hallucinatory conscience. It will be seen, however, that nothing could be further from the truth than such a view. These "Strengths" are utterly evil, mocking spirits in whom I have been unable to discover a single redeeming feature. It is

true that they accuse Mr. A— of past offences of thought or action and inflict extremely complex penalties upon him, but they do so not because of any disapproval of his actions, to which in a moral sense they are utterly indifferent, but only in order to gratify their delight in the infliction of punishment.⁽²⁾ Their character traits, if such a term is permissible, are best indicated by referring to the statements of Mr. A— himself. "Their talk is a kind of tyranny. Their attitude is one of vicious mastery—they say they are greater than God. They like to punish; they will punish me for anything I did in my youth. It is simple wilfulness; a whimsical capriciousness; not proper punishment, but just a delight in punishing. He says it is just his *will* to punish. He keeps me terror-bound, as if life would terminate in an hour. He strikes me quite capriciously. He is the sort of person who loves to strike without reason. He is vindictive and revengeful, a mixture of villainy and cunning. He annoys me for the joy it; it is a semi-brutal attitude, misused strength. They control of me viciously. He has a cantankerous will against me; he is a *continuer* of corrections; a *getter* into vicious states; a *brain trialer* to see how long I can stand him; a pernicious authority correcting me as if I were a child of three; a *delighter* in dislocating things; a *seller* of me; a blackmailer; a lover of punishment. He is not a creator but a disturber—a lover of slighting moralities (sex). It is just a domination and brutality." Sometimes Mr. A— utilises metaphors to explain his impressions of the "Strengths." "He is like a sloshing bull; like a drunken woman. In voice he resembles a big strong man, angry with me as if I were a little child. I put the child as much smaller than a child and him as a giant—in my mind much larger than anything. My mental picture is simply *strength* and a *voice*. He is like a great hectoring schoolmaster whirling a great stick on all around him." At times the "Strengths" are more genial, a condition which Mr. A— aptly describes in the phrase, "When they pretend to be pleased with me their attitude is that of a kind of *letting off of punishment*."

It will no doubt have been noted that the "Strengths" are sometimes spoken of as "he" and at others as "they." This is due to the fact that there are two of them—father and son. The father plays quite a minor *rôle* and has "gone in" for some months now. Mr. A— speculates a good deal as to their identity, but has not arrived at a definite solution of the question. One view is that they are "*enlicensed*" persons who have been given permission to do what they will with himself and humanity without interference from God. While, however, they never cease to be supernatural forces, it must be next noted that they assume the *rôle* of various human personalities. "They take on the voices of people remembered of me," as Mr. A— says. This does not quite accurately express all the parts they play, in so far as they often

pretend to be Mr. A—'s children, though he is actually unmarried, and, curiously enough, the "Strengths" tell him that these children, whose personalities they pretend to be, are two brothers of his who died before he was born. "Both of them," the patient says, "take the part of my children. These children are of tremendous strength—greater than God." In this infantile pose the "Strengths" are utterly impossible, capricious and irritating. They make incessant demands, play all kinds of malicious pranks, have to be fussed, amused, taken out to the theatre, tea-shops and so on. They make Mr. A— thief, forge cheques, give them large sums of money, build houses for them, and so keep him in a constant state of irritating activity. At times they make the patient do even stranger things, such, for instance, as stand on his head on the sloping roof of the villa 5000 times. As Mr. A— remarks, "An absurd thing to be done of mortals." Naturally these activities are only performed mentally, and it is of interest to note in passing how subjective pre-occupations of this kind attain a greater reality-value to our patients than environmental situations. The use of the word "mortals" in referring to human beings indicates the high degree of detachment from the affairs of life which the patient gradually acquires from the intimacy of his contact with "Immortal Strengths."

Other favourite *rôles* are those of Mr. A—'s father and brother. This is shown in the following characteristic sentences. "It is just domination and brutality. It originated first because I said I did not mind if my father was dead . . . He poses as my father because I said the child looks up to his father, not because of his love, but because of his superior strength . . . He has got punishment on the brain. He likes pretending to be my brother when he was in a domineering way with me. It is absurd to pose as my brother when I am not a child, but a man of fifty. He even uses his phrases and says, 'You are a person to be mastered,' or uses domineering like sentences to me such as, 'Why don't you take your hat off more respectfully to the gentleman?'"

It is now necessary to examine more closely the actual content of the hallucinations. These will be found to harmonise with the character of the "Strengths" as previously indicated. The sight of an actual person or the memory of someone provokes such suggestions as the following: "He tells me to shoot the lady . . . He suggests that mortal female frameworks should be knocked about . . . Hit Mr. B— with a brush . . . Stab an attendant . . . Cut his throat. . . . He suggests the excessive maiming of animals, or it may be just a little destruction to a silk bag . . . They like me mentally to bring people in a coffin to them. As a boy I used to make fun of funerals. Circuses I called them, and laughed. I am used to mortuaries and cutting bodies. He is very amused and pleased at this.

It is a kind of devilry—in one of Marlowe's plays a character is excessively pleased to make fun of funerals." Many of the hallucinatory suggestions are more elaborate and indicative of expansive trends. "He would put me into a position of great power, but he would use me for producing evil—nefarious strength, crimes, murder, committing of crimes of a higher type than yet known to mortals. I could crunch up people like tissue paper. They suggest that I should create a war in the Universe. This is an absurd enlargement of myself. I know nothing about war, directing armies, the commanding of soldiers. They induce me to mentally commit criminal acts; they would make me a Napoleon among criminals." Mr. A—'s comments on these hallucinations are interesting and significant. "I am not accustomed to think of destroying things. I am not a person who thinks in this way and controls himself. They would not naturally occur to me. My parents said I was fond of destroying things. I do not think there was anything in it. I had much opportunity in the country. I could have committed arson. They only meant toy things, fencings, doorways, books. The 'Strengths' get this from my brain I expect. I may have said about some man, 'He ought to be shot.' They accuse me of procuring *endeathment* of people, and would make me do ridiculous things. If I obeyed no one could prevent me from running amok and killing people. I am not a destroyer of property; I could have become a destroyer on a large scale. I should only require a brotherhood of people—people who are not required politically at all (anarchists). I could have joined them."

It must next be observed that these hallucinations are not merely sensuous images, but they are activities which influence the organism in the form of actual movements. We may again refer to the patient's own statements. "They add strength to my limbs. I put my hand on a man's shoulder, and they make me hold with added firmness to hurt him. I touch a man with my foot gently, and he cries out loudly. It may be that the Immortal Strengths put strength in me to hurt him; or they mentally hurt him; or they make him shout so that I shall think I hurt him. I keep from sharp instruments because for mischief they turn it on my hand. They make a needle prick me, and if I had it in my hand they might make me run against a mortal with it. They give me the sensation of my digging nails into my palm. Mortals might explain it and say it is my habit to wound myself—a self-wounder. If I put my hand to my head he makes me strike myself. It does not matter with the soft hand, but there might be a hammer in it, and if I take a stick he crashes it on my foot." Curiously enough, when Mr. A—, as sometimes actually happens, destroys a mattress or some of his clothes, he always protests that it was an accident, and becomes highly irritated with me, and inaccessible for a day or two. Thus when

once he tore his pyjamas he explained, "I scratch my shoulder ; then I catch hold of skin and muscles ; half scratch, half pull, the stuff is weak and goes. It is a little irritable spot on my shoulder. This doing of mine has been done for years. I have always been a preserver rather than a destroyer of property." The hallucinatory experiences do not only determine movements, but tend to provoke attitudes and muscular tensions. "He is fond of moving organs of my body. He likes to hold limbs in fixed positions ; or to keep them still when they are about to be moved. He keeps me in the position of standing with my hands and arms in a position of discomfort. He gets it from my brain that it was done of me at school."

One of the most prominent, and perhaps most interesting of the phenomena in this case are the kinæsthetic and organic hallucinations. A few examples may be given. "He gets into peculiar *sudden* states of mind," says Mr. A—, "when there is a tremendous rage against me. They knock my body about as if I were a baby—knocked about and put to bed. They give me pain in the body and twist my toes. They give me a feeling of crushing in my shoulder-blades. It is wilful strength in the form of pains. They do this because they have got from me what I have seen—a deformed and twisted beggar huddled up in the street. They struck me in Paris for the first time ; they struck me in the form of a battery. He showed this form of strength because he knew I had once or twice put a coin in a machine which gives electric shocks. At times he says he will strike me as I have struck others. I have the sensation of being struck in the bone or flesh. They do not often knock me over in their angered states, they merely apply strength. They give me the sensation of being crumpled up ; the bones and all have that feeling—not broken, but crumpled up—a sensation of becoming a bag of powder." A particularly curious hallucination is that of being in the pains of labour. This the patient describes as follows : "He rolls me about. He kind of distends me like a ball inside ; like a baby. I tell him I am not a person who can conceive anything. I only know of what happens from what women tell to men ; from what I know of distensible pressure. I know it from diagrams—I was a medical student. They are sensations I have thought of—rocking-horse movements, like the piston-rod of an engine. All this arouses tremendous irritability of the mind. It is as if I took hold of a mortal's chair and rocked it ; it would annoy, disturb, upset. He demands all in excess of what the brain can do. He reproduces the sensation of being caught hold of, as if in a crowd at a theatre and forcibly removed by an irascible person."

One other aspect of the activities of these "Strengths" must next be observed, namely, the influence they exert on people other than Mr. A—himself. The patient is of the opinion that "they control all humanity,"

and he gives numerous instances in support of this view. When these instances are examined they are all found to be somewhat similar in character, and we may briefly say that any situation which irritates, humiliates or makes a person look ridiculous, and any accidents, crimes, tragedies or cruelty, Mr. A— ascribes to the malicious activities of these “Strengths.” A few examples will make this clear.

An excited lady in the street.—“They rule all mortals and produce effects on them. A lady in London went round and round in the middle of the road shouting at the top of her voice. I thought this was not the kind of thing a lady does. I attribute it to *them*. Ladies do not turn round and round in great circles in the road and then go home. It is preposterous.” Mr. A— recognises that this incident is susceptible of other explanations, however, and adds: “Another mortal might have said that she was annoyed of certain doings in the street.”

Some mistake about the time in an hotel, etc.—“He likes dislocating things. He will make everyone get up at five in an hotel and be very busy. I asked the maid what had happened. She said she did not know and could not understand it. It is a kind of enchantment of people. In an office he makes the wrong papers delivered to people, and he forces people to sign papers with signatures of a fraudulent kind.”

Injuries to children in street.—“He behaves like a child because I once told him I was fond of them. Especially holding children. I have held them dead and alive in my arms . . . They like romping with children, but against this is the throwing down of children. They often do this, and I have seen some who were injured of the gravel. He threw them down to see if I would be sorry or commiserate with them. To stop him at times I have had to try continual talking without referring to children—to keep him off the subject. In such cases I have carefully ascertained that there is nothing to cause the children to fall—an obstruction or stone. The subject first came up when I was watching the children come out of school—a barrier was placed outside the gate. He was very inquisitive about it, and I explained to him it was to prevent the children from destroying themselves by rushing straight into the street. He amuses me very much at times by placing a lump of earth heapings in the way—people fall into it and get covered with mud.”

Hallucinatory conversation about a man on ladder.—“If I see a man on a ladder he will say, ‘Is that safe?’ I tell him I am not interested, but he insists that I shall stand there and watch. I stand there for a few minutes and say, ‘I think so, but of course it *may* fall.’ As I walk away he says, ‘Look back and see if he is safe.’ If the man falls from the ladder it is not my fault, and *he* has thrown him down, but yet he says to me, ‘You wished him to fall. If you had not thought he

might fall you would not have given me the idea of knocking him over.' He makes me responsible for it."

It is not here proposed to attempt any survey of the theories which have been formulated to account for hallucination. This would indeed be an undertaking, as the literature is so vast. We may briefly say that until quite recently the *anatomical* theories of hallucination have been most in evidence and have been most generally accepted. This was largely due to the great advances in neuro-physiology, especially in respect to cerebral localisation. The anatomical theories were based upon the assumption that independent psychic elements were localised in distinct areas of the cerebral cortex, and they consisted essentially in the translation of the facts of clinical observation into anatomical terms. Such views were closely bound up with the hypothesis of psychophysical parallelism, and apart from the fact that they merely paraphrased mental phenomena into anatomical language, and were thus not really explanations at all, the hypotheses upon which they were based in respect to cerebral localisation do not accord with the more recent neurological conceptions.

There is now an increasing recognition of the fact that psychology is not so much concerned with the description of mental states as it is with behaviour or the organism in action. Mind and body cannot be regarded as a duality, and mental activity must be considered in relation to the organism as a whole. As Prof. Wildon Carr has said, "The relation of mind and body is not causality, nor parallelism, but solidarity."⁽¹⁾ The focus of interest has now shifted from the introspective study of consciousness to the study of conduct—from thought to action. The organism is constantly adjusting itself to real or imaginary situations by means of movements—actual or nascent—and our chief concern in psychology must now be to determine, not merely the content of thought, but the biological needs which an individual endeavours to gratify by means of his reactions to his environment. Every thought, image and perception is ultimately determined by some instinctive or organic need, and involves adjustive activities on the part of the organism. In respect to hallucinations it may be said that attention has been largely directed to the image and its psychic characteristics, and that the biological need of which it is the expression and the activities of the organism to attain this need have been relatively neglected. These important components of hallucinatory experiences must receive due emphasis if the significance of these interesting phenomena is to be thoroughly understood. A brief survey of the case of Mr. A— will make this clear.

We have in this case a highly-organised hallucinatory system, which for convenience may be described as a second personality, occurring within the awareness of the main personality, but not recognised as

part of it. Owing to the fact that the patient proved so unusually communicative it has been possible to study this personality and to gain some insight as to its nature. We estimate the character of an individual according to his speech and actions, and this is what I have endeavoured to do in the case of these "Immortal Strengths." From the account which has been given it is apparent that we are dealing with a personality of a primitive type of development—a personality of unlimited strength and of unbounded egotism—savage, infantile, ruthless, capricious, cunning, irresponsible, aggressive and destructive. The predominating traits are an overwhelming lust of domination, a hatred of humanity and a delight in the infliction of pain.

One significant fact emerges clearly from this investigation—namely, that the hallucinatory content exhibits a definite uniformity of theme. The images coming into the mind are therefore not haphazard or indifferent; they are consistent in character and expressive of what is best termed a sadistic trend, this term being the one which is perhaps the most suitable to describe its activities as a whole. Sadism, as such, I do not propose to discuss here, and will only say that I am inclined in this case to regard it as an inborn phenomenon of reversion rather than as an acquired tendency, though it may have been reinforced by events in childhood.⁽³⁾ The essential point I wish to urge is that this sadistic trend has been the determining factor in the development of Mr. A—'s character and reactions to life, and that the psychosis is only a further stage of its development.

As the patient grew up his character traits clearly indicated the existence of some abnormal trend. He always behaved "as if every man's hand were against him"; he was intensely suspicious, secretive, egotistical and self-willed. He showed extreme irritability at any attempt at control, and developed an intense hatred of his family, his teachers, and, as he went into the world, the whole of humanity. At times, even when grown up, he exhibited episodes of passionate violence against his relatives, by his conduct causing them great distress, and provoking in them a state of fear and consternation. During his career a number of definitely sadistic acts occurred, the details of which need not here be given. There are thirty in particular—"offences done of me," as the patient says—which play a prominent part in his psychosis. The "Strengths," in later years, "extracted" them from his brain and "throw them up" at him. They are not in themselves very serious—bizarre, half-completed acts, striking people with whips and so on. Some of them had serious consequences, however, and forced him to relinquish his early career. Thus he went through life—a solitary, uneasy, morose man, hating humanity and the world in which he lived. He stimulated his then unconscious trend with accounts of crimes, tragedies and suffering, by watching the misfortunes and humiliations

of others, and street brawls and accidents ; by accumulating a wealth of knowledge of the underworld and the methods of the secret police in the various countries he visited ; and by the indulgence in appropriate phantasies. One curious pleasure he permitted himself was to stand near a policeman to look as if he were guilty of some crime, thus gaining a dreary satisfaction analogous to that he would have felt if he had actually committed one.

It is interesting to observe, also, how the patient interprets biological facts in terms of his sadistic trend. He broods on the notions that the tendency throughout nature is for the strong to exterminate the weak, and that in consequence many animals and races have become extinct ; that even in plant life the plants are destructive ; that "they absorb nourishment more than they need for the superfluous satisfaction of their stomachs," that "they crunch up an insect for the *joy of destruction*—a destruction which increases their strength and intellect at the expense of others," and that "the destructive activities of a plant are equal to the destruction of 100,000 men."

The pervading influence of the sadistic trend upon the prepsychotic reactions of the patient is thus clearly evident. And this morbid trend finds its roots in the primitive instinctive needs of the organism. It is a physical need, like hunger or sex, which seeks only its own ends, and impels the patient into activities which lead to their gratification and fulfilment ; for the energy which animates this trend is life itself, and must find an outlet in some form of movement or another. Prior to the development of psychotic symptoms, the perverted trend was able to find a kind of strangled expression by means of phantasies, appropriate perceptual activities (the beggar in the street, etc.), and overt acts of violence—analogous, of course, to the stimulation of the sex instinct by suggestive plays, obscene jokes and so on. In a man of Mr. A—'s culture, however, the resistances to any complete or serious expression (actual crimes, etc.) of his affective craving would, of course, be enormous, and an hallucinatory dissociation was thus the only method by which the craving could be actualised. It is, perhaps, permissible to say, with due reserve in view of the complexity of the subject, that if it had been possible for the trend to find adequate gratification by appropriate actions, no psychosis would have occurred, but such a solution of the conflict was obviously impossible. A man cannot go about the world "committing crimes of a higher type than yet known to mortals." We may suppose then, that a point is ultimately reached when the accumulated energy of this perverted biological impulse is unable to find an adequate outlet, and the development of hallucinations is to be regarded as the final break at the moment of a too severe tension. Kempf has described the mechanism as follows :

"Complete affective dissociation occurs when the repressed affect

becomes vigorous enough to break through the resistance while the individual is not aware that it is doing so. The socialised personality or ego cannot at any price accept the existence of the horrible, dissociated affect as part of its personal makeup. This is extremely common in men and women who suffer intense agonies of fear from a persistent, uncontrollable craving for sexual perversions. In homosexual men, who would commit suicide rather than accept the tendency to sexual perverseness and yet who love the world, we often see the tendency of the growing sexual cravings breaking through the resistance in dreams—night terrors—and gradually, as the defence becomes exhausted, hallucinations of homosexual advances and finally of assault occur The exhaustion of the capacity to control the autonomic forces of the personality is in no sense dissimilar to that of a student who, after intense efforts to co-ordinate his interest in study in a distracting situation, becomes fatigued and must finally yield to the distractions.”(2)

An hallucinatory expression of an organic need leads to its complete satisfaction, and it results in a much more effective release of tension than would be the case in the process of phantasy creation. It may be regarded as a complete wish-fulfilment. A phantasy is always recognised as such, but the hallucinatory experience has the effect on the personality of events actually happening. A dissociated image is of perceptual value, and it has the same reality characteristics as the true percept. It has the same concreteness and intensity—it “strikes the mind” with the same “liveliness or force”; the subject has the same passivity in relation to it; like an impressional experience it is something over which the personality has no control; and above all it is associated with the same motor and organic sensations which accompany the perceptual responses of the organism. Thought, as we know, is always expressed in the organism by muscular tensions and nascent movements of an adjustive kind, but in hallucinations these motor activities are much more definite in character. I would suggest that it is essential to realise this if we are to arrive at a satisfactory understanding of hallucinations. An hallucination is not adequately described by regarding it merely as a dissociated image coming into the mind. It is a complete and actual revival of some past experience—a revival in which the whole organism is involved. This is shown with particular clearness in the case of Mr. A—, and may be illustrated from the descriptions of his experiences which the patient furnished himself. Sometimes, as was pointed out, overt movements occurred—hurting people, self-inflicted injuries, tearing clothes, etc.—but particular reference may be made to the implicit activities which take both the active and passive (masochistic) forms of pain and cruelty impulse. When the patient “mentally commits criminal acts” (sadism), or as a punish-

ment is forced to "take off and put on the tablecloth mentally 100 times" (masochism—a humiliating task), these acts are to him of the same psychic and physical value as if they were actually performed, and as a rule the patient does not trouble to distinguish between them. And they *are* actually performed by appropriate nascent movements and muscular tensions, each "mental" movement being precisely and definitely carried out in complete detail. He physically "lives through" his experiences, as we may say. The sensuous image of the hallucination takes the place, and is the psychic representation, of an actual external stimulus. It is an image aroused by, and appropriate to, the organic need. The movement responses (tension, attitudes, etc.) which occur are identical with those which occur in ordinary perception, and the resulting kinæsthetic sensations are included in the total hallucinatory experience. Before the development of the psychosis the patient had to *seek out* situations which would stimulate his abnormal trend; in the psychosis these situations are mechanically, and incessantly, provided by revived memories of past experiences. Especially do the kinæsthetic hallucinations provide a striking demonstration of the revival of motor and organic sensations in hallucinatory conditions. "They knock me about," the patient complained, and then we find that these persecutions are the reproductions of past experiences which the "Immortal Strengths" have extracted from his brain. When Mr. A— saw the twisted beggar in the street, his total experience was not confined to the visual perception of the man. Since the experience harmonised with his perverted need, it would be pleasant to him and would provoke agreeable visceral disturbances (emotions). It would provoke also nascent movements, attitudes and tensions corresponding to the twisted form of the beggar himself. The patient would *identify* himself with the beggar, and in his own organic and kinæsthetic sensations would enjoy the incident in its entirety. (A similar reaction, expressed in facial responses and tentative movements of the limbs, is often to be observed in the audience of a successful speaker or actor.) The hallucinatory revival is physically an *actual* revival of the original experience. "They give me pain in my body and twist my toes," the patient says, and in so doing he is describing the kinæsthetic and organic sensations which are produced by the nascent movements, tensions and organic disturbances resulting from the internal stimulus of his perverted craving. These kinæsthetic hallucinations are of particular interest, because they would seem to shed some light upon a symptom which is so commonly to be observed in our patients—nocturnal assaults, interference, etc.

This case provides material for much discussion, but I have here confined my comments to its general bearing on the problem of hallucinations. It shows, quite clearly I think, that we must not seek to

explain these phenomena by exclusive preoccupations with the sensuous images and by references to possible changes in the cerebral cortex. Rather must we formulate our interpretations in terms of the whole organism. The whole symptom-complex in the case of Mr. A— would seem to be the reaction to a perverted organic need, and the clinical facts suggest that the primary disorder is much more probably to be located in the autonomic system than in the brain. A point was reached when this wish, hunger, craving or need could no longer find adequate expression in the form of motor activities, and the development of hallucinations may be regarded as a release of accumulated energy—as a kind of safety valve. In hallucinatory form this craving is released from all inhibitions and resistances, and is free to expand and discharge itself through motor channels. All that Mr. A— wished to be and do is expressed in these experiences. And the interest of the patient is drawn from the external world and becomes inwardly directed, so that he lives all the time in his hallucinatory phantasies, and all his activities are a reaction to their promptings. Not only do the “Immortal Strengths” incessantly throw up appropriate memories of the past, which the patient, mentally and physically, lives through again, but they develop into a personality of unlimited strength and almighty power which viciously controls the whole of humanity. Thus we may regard an hallucination, not as a thought, but as an *activity*, the purpose of which is to afford a release of the tension derived from a biological need which is unable to find a normal outlet. It is a manifestation involving activity of the whole organism.

Sometimes Mr. A— rebels against the authority of these “Strengths” and refuses to carry out their orders. On such occasions he describes his experiences as follows: “They get into excessive states of mind—a mixture of mad baby and half-mad woman. It’s extraordinary what they produce—fantastic rubbish, wild imaginations, not of place or things. It’s a kind of bordering on anger. I couldn’t imagine such rubbishy fantastic stuff. It’s a kind of epileptic fit—moving my body and making my muscles quiver. It’s extraordinary when he hits out. It’s all irrational movements. I cannot describe it in words, only movements. It’s like a top at the end of its gyrations, translated into a lot of *wordings*. It’s a sort of bad type of diminutive woman—a sort of dwarf, an object of derision.”

In this word-picture the patient furnishes an excellent description of the diffuse physical excitement or suppressed hatred and anger which results from the thwarting of an imperative instinctive need. It also provides an interesting example, as does, indeed, the whole case, of the unsuspected richness of mental life which is hidden behind the mask-like exterior of these curious schizophrenic personalities.

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(²) These punishments and the occasions which give rise to them cannot be indicated in this paper. It is proposed to describe them on a future occasion.

(³) Since the term sadism implies cruelty towards the sexual object it is here used with much reluctance. Though the trend contains definitely sexual elements this would scarcely seem to justify the view that it is exclusively derived from the activity of the sexual instinct. It might, indeed, be equally legitimate to regard it as an hypertrophy of the *will to power* instinct. To ascribe the activities of this trend to some special instinct, to trace it to some origin other than itself, would be, so I believe, an unnecessary distortion of the facts. An animal exhibits an attitude of domination and cruelty both towards the sexual object and towards its prey (cat and mouse). That is to say similar responses are provoked by quite different situations and are the common expression of varying instinctive needs. Furthermore, a child during its development manifests the same tendencies in response to various stimuli, and, of course, cruelty traits exist in all human beings to a greater or lesser degree. This trend could obviously be interpreted in terms of any particular theory already held by the observer. I prefer to regard it objectively as just itself, and it would be more satisfactory if it could be included under some indifferent symbol such as X. (X = the sum total of the activities by which it is expressed.) We are much hampered by names, labels, and theories.

Familial Care of the Insane. By C. STANFORD READ, M.D.,
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HUMAN activity is always conservative, and the sphere of mental medicine is patently no exception to the rule. Since the reaction took place from the callous and barbarous treatment of the insane we have progressed far, and are rapidly tending to regard the mentally disordered individual from a similar point of view as the physical sufferer. The late war has brought the problem of mental disease vividly to the notice of the laity, the medical fraternity have been stimulated thereby to take greater interest in the subject, while even many psychologists and psychiatrists have through war clinical experience become more humanistic in their outlook upon the psychotic patient. Following upon the special provisions which were made for those who broke down mentally in the service, there is much discussion as to what alterations should be made with regard to the care for the insane, and more especially those who are in an incipient stage. That some adequate provision must be made for early care and treatment hardly requires pointing out, for its absence is perhaps the greatest defect in the existing organization. Any real advance, however, in this direction cannot take place until a fresh generation of psychiatrists have had the opportunity of being thoroughly trained to understand the genesis and pathology of those initial symptoms with which the average asylum physician of

to-day would be more or less powerless to cope. We have arrived at the stage in which we have built huge caravanserais in which the insane have an environment which leaves little to be desired for this type of system. Is it not possible that we have lingered so long at this stage in a self-satisfied way that the conclusion is reached that little more can be done to alleviate the lives of those who have become mentally afflicted? Is this extreme measure of segregation away from society the ideal to be aimed at for the treatment or comfort of the patients? Is it also good for the social community? To a large extent at present so-called treatment merely means institutional confinement.

Though the conception that insanity involves demoniacal possession has consciously quite lost sway, it still exists in a shadowy form unconsciously, so that society cannot help even now but look upon the alienated with fear and awe and therefore as individuals who must be shunned and ostracised. The attitude of the medical profession and even many psychiatrists is such that they tend to regard relegation to an asylum as the safest and most correct procedure when an individual shows any signs of mental abnormality. Nor do I think that this conception of their duty is mainly founded upon the idea that expert treatment should be sought at once, but it arises largely from their feeling that exclusion from the social community is a moral as well as a medical obligation. It is grievous to realise the number of cases which are so disposed of, but which with care and understanding need never have been secluded within asylum walls.

The above reflections, though present for long in my mind, have been stimulated by a recent visit to the Colony at Gheel, in Belgium, where the so-called familial treatment for the insane has been in existence for some hundreds of years. It seems that the present generation of psychiatrists know little if anything of this Colony, notwithstanding its antiquity, its historic interest, and the important lessons it may teach. As far as I am able to judge, no recent literature has been devoted to the subject, the most modern being contained in the reports of the Congresses on Insane Home Relief which took place in Antwerp in 1902 and in Edinburgh in 1904.

It seems that Esquirol first directed the attention of the scientific world to the Gheel Colony, and in his *Maladies Mentales* he records a visit made by him in 1821, and though during the middle of last century a good deal of interest was taken in this system, and much written about it, meagre attention has since seemingly been paid. Gheel is a Belgian town lying some thirty miles East of Antwerp, and having a population of over 15,000 in its nine parishes, which extend over a large circuit of the surrounding country. Within this area some 1500 certified mental patients are boarded and cared for in households. Under this system the patient lives as one of the family and has no

restrictions placed upon his freedom, except that he must be "home" by 8 p.m. in the summer and by 4 p.m. in the winter, and is not allowed to enter an inn, or be served with alcoholic refreshment, without special permission. Though the majority of the patients are Belgians, foreign nationality is no bar to treatment, and I had the pleasure of greeting an English and a Scotch gentleman, both of whom had been in Gheel many years, from whom I learnt many interesting details of the system from their point of view. A patient arriving at Gheel, unless there are special indications otherwise, is placed in the central asylum (which for obvious reasons is styled the Infirmary) for observation, so that the Medical Director can study the type of case he has to deal with, and can make sure that it is one suitable for the system. If at any subsequent time any illness should arise requiring special medical attention, or should any episodic outbreak of recalcitrancy or violence be manifested, the patient can be temporarily transferred to this Infirmary, where he will be under a stricter and a safer *régime*. As soon as a case is sufficiently understood, the question as to which family he or she shall be relegated to has to be decided. This is always an important point, which depends not only on the social class of the individual, but upon the patient's choice and perhaps that of the relations, and also upon the Medical Director's knowledge of the special adaptive requirements needed, and the families where he is most likely to meet such. It not infrequently happens that a patient has to change his *milieu* more than once before he feels he is in the correct environment in which he can feel at home. The families themselves, so largely from tradition, take a highly active interest in the happiness and welfare of their charges ⁽¹⁾ that their co-operation in the work may always be counted upon. This care for the mentally afflicted is quite voluntary and any *nourricier* has to have shown evidence of an irreproachable character before the great responsibility is allowed. The pecuniary emolument gained in this way is small, and it is difficult for the casual visitor to understand how it is that such a seemingly philanthropic attitude towards the insane can exist until he learns the history of the Colony, which will be dwelt on later. For the purposes of medical supervision the Colony is divided into four sections, for each of which a medical officer is responsible to the Medical Director, who in turn holds his office under a special Department of the Belgian State. It is not my intention here to go into greater detail concerning the organisation of Gheel Colony, and those who are sufficiently interested can refer to the reports of the Congresses I have already spoken of.

It has been already stated that this Colony has existed for many centuries, and, as this is undoubtedly a great factor in its success and accounts for the special attitude adopted towards the alienated, it is interesting and instructive to hear of its early history and its foundation

upon legendary lore, with which, probably, many true incidents are blended.

In the seventh century, when Christianity first penetrated into that part of ancient Gaul which now forms the Kingdom of Belgium, a church was erected in the desert region lying to the north of the modern Brussels and now known as the Campine land. This church was dedicated to St. Martin, the apostle to the Gauls, and a few huts, erected by the Christians who gathered round it, formed the nucleus of the present town of Gheel. Among those who soon settled in this colony was the daughter of an Irish king, named Dymphna, who sought a refuge there with her confessor priest, who had converted her to Christianity. The reason for her flight thither was to escape from her father, who desired to contract an incestuous union with her. At Gheel they earned the affection and respect of all, but their security was short lived as the father pursued them to their retreat, and, becoming incensed at his daughter's refusal to submit to his wishes, ordered his retinue to kill them. The priest was slain immediately, but, as the soldiers refused to put the princess to death, her father himself beheaded her. Among those who witnessed this martyrdom were some insane, and it is stated that such was the effect of the scene that recovery resulted. This was regarded as miraculous, and henceforth remedial power was imputed to the piety and virtue of this princess, who became known as Saint Dymphna, and to whose shrine numbers of the mentally afflicted flocked in hopes of cure. Gheel thus became a place of pilgrimage for the insane, where probably some did receive benefit for psychological reasons, in the same way as a visit to Lourdes may affect the psychoneurotic sufferer. The pilgrims were received and lodged in a specially constructed part of the church which was dedicated to St. Dymphna, and at whose tomb they daily prayed. This accommodation, however, soon proved insufficient for the increasing numbers of sick who journeyed to Gheel, so that they were temporarily housed in the adjoining dwellings. In this way the inhabitants of Gheel have at a very early period accustomed themselves to have the insane amongst them, and in the course of centuries this custom of familial care has become habitual and extended more and more. From its commencement till last century the colony administration was of a religious or semi-religious character, but in 1852 it was taken over by the Belgian State, since when it has had a world-wide reputation.

The Medical Director of such a colony must, for the success of the system, be a physician possessing special attributes. His psychiatric knowledge must be extensive and practical; he must be a man of the world and be capable of taking wide viewpoints; he must be essentially humanistic, patient and sympathetic, and be capable of rapidly gaining the patient's confidence and be looked upon as a friend as well as a

physician ; he must be a good organizer and possess infinite tact to smooth away the often trivial adaptational difficulties of those under his care. Such a type of psychiatrist is born, not made. It was indeed a privilege and pleasure to be guided round the Gheel Colony by its present Médecin-Directeur, M. Sano, to witness the cordial welcome he always received alike from patient and *nourricier*, to hear his genial greeting and kindly advice, and listen to his interesting discussion on the cases, the welfare of which he evidently had so much at heart. Together we visited every type of household, both in the town itself and in the outlying farms, and I thereby gained the opportunity of seeing the intimate lives of the patients and comparing their circumstances with those who are herded within asylum walls. Most types of mental disease were met with, though it goes without saying that acute cases and those who patently would be a danger to the community or themselves are not thus boarded out. The uninitiated, though, would be astonished to find the large number of patients they would consider as fit for asylum confinement, and yet who at Gheel manage without difficulty to adapt themselves fairly to their free and kindly environment. In the central Infirmary one meets the cases which are either temporarily or permanently unsuitable for freedom, and the latter are drafted off to asylums elsewhere.

Through early Christian influence and through the traditions of centuries, the insane have come to be regarded by the inhabitants of Gheel, not as individuals who are to be shunned and feared and placed without the pale of society, but as sufferers from disease which may be cured or alleviated, or who, at any rate, may have their lot rendered happier and less burdensome by human understanding, kindness, and sympathy. The *nourricier* takes a pleasure and much trouble in smoothing away the adaptative difficulties which beset his patient's path, and only too gladly works hand in hand with the medical officer with this common object in view. It is at once clear that, because these feelings have been handed down from generation to generation, this community looks upon as natural a condition of affairs which elsewhere would not be tolerated for many days. Dr. Sano smiled at my surprise when, on entering one of the households, we were soon hearing the somewhat loud voice of a female patient who was conversing with herself in a maniacal manner in her own room. He observed that he did not presume I should regard such a case as appropriate for family care, and yet I was assured that she had lived there many years, had during that time acted much in the same way, that those in the house had got so accustomed to her ravings that they hardly noticed them and in no sense wished her removal. Until the organisation was laid down by the Belgian State on more scientific lines, undoubtedly the main defect of the system was the large proportion of unsuitable patients thus

treated, and though the treatment at Gheel was immeasurably superior at that time to that meted out to the inmates of asylums, much mechanical restraint was in vogue. Perhaps at the outset the arguments against the familial care system carried out on a large scale are that the intimate admixture of the insane and sane must in time have a deleterious effect on the latter; that with so much liberty given to those who presumably lack inhibition, immorality is bound to be rife; and that the possible dangers of escape, violence and suicide will be difficult or impossible to control. In practice none of these fears have been found verified. The mental health of the population of Gheel has always compared most favourably with that of other Belgian towns; immorality and illegitimacy are at a minimum; and it is very infrequent that any injury to person or property is reported. An escape is now and again attempted, but usually the patient soon tires of the long journey on foot he is forced to undertake and spontaneously returns, or he is not uncommonly recognised by some of the outlying inhabitants and recaptured. The contentment of the vast majority of the patients is such that the idea of escape from their environment does not easily enter their minds.

There appears little doubt that a drawback to the familial system, if at all extensive, has been the difficulty of adequate medical supervision, and though this, perhaps, may be true to some extent even to-day, I must confess I wondered at the intimate knowledge which the *Médecin-Directeur* demonstrated of the large number of cases we visited. Such close insight can only have been gained by conscientious hard labour. The relative proportion of medical officers to patients is of course grossly inadequate in British public asylums, so that the individual attention so often needful for a satisfactory understanding of the mental disorder is not feasible. When the patients are widely scattered this factor becomes of added import.

It seems that all forms of mental alienation can be treated on the familial system, though it is obvious that those who after observation show a continued anti-social tendency, and those who thereby may be a danger to themselves and others or who would offend the public decency, must be segregated away from the community in institutions. The experience of Gheel demonstrates that many insane who show dangerous proclivities in their home *milieu* are quite peaceful and quiet in the Colony, through the great influence of their change in environment and the kindly and understanding attitude taken up toward them by the Gheel population. It is recorded that a violent maniac who had been brought to Gheel tightly bound down with ropes to a hand-barrow and guarded by two men, which was thought necessary to ensure safety, permitted himself to be led about contentedly by a child of his *nourricier*. Such a statement, though, is not difficult of comprehension to any

experienced psychiatrist, who not infrequently sees this change after admission, when the patient is no longer in that atmosphere around which his complexes centre, and when he is tended by those who have been educated to treat him with tact and understanding.

We do not, I am convinced, sufficiently realise the harmful effect to so many insane of herding them together in large numbers. The laity have a more or less fixed idea that this is prejudicial to recovery, and though psychiatrists endeavour to combat such a proposition, there is without doubt a good deal of truth in it. The dull routine, the constant supervision, the lack of external interests, the unremitting society of the abnormal, all tend to handicap attempts at normal adaptation and render sublimation more difficult. Jung believes that the worst katatonic states and the most complete dementias are in many cases products of the lunatic asylum, brought about by the psychological influence of the *milieu*. He says: "It is a well-known fact that the very worst demented katatonics are to be encountered in badly administered and overcrowded asylums. All the conditions which would reduce a normal individual to psychical misery will have an equally baleful effect on the patient." Without doubt many modern psychiatrists would agree with Jung in this, but would point out that though a regrettable factor in our modern system of treatment, it was difficult, if not impossible, to avoid. However, it remains for the future generation of alienists, who will be much more enlightened on the subject than we are, to see whether such a difficulty is not to be overcome. At any rate some modified familial care system would always serve as a useful break between asylum incarceration and the life of freedom in the outer world. This I know in a few cases is arranged for by the Mental After-Care Association, but many more should thus have the opportunity of gaining confidence in their struggle to meet the requirements of adaption to reality.

It may here be asked whether such a system as that of Gheel proves its superiority by showing a greater percentage of recoveries. This can hardly satisfactorily be answered, because in this instance we are only dealing with numbers specially selected, and so any statistics would be extremely misleading. Such a question, however, is to some extent beside the point, for though it might be possible that with our present great ignorance of the pathology of mental disease the ratio of cured might be no higher, the fact remains that under such a system the patients live a more normal existence, one easier of adaptation and therefore a happier one, and it too seems proved by experience that truly demented states are thereby lessened, prevented, or retarded; for modern psychopathology teaches that much that passes for dementia is the giving up of all attempt at adaptation because the task is too formidable.

Presuming, at any rate, that much of what has been said is true, should we endeavour to copy the Gheel system in this country, or institute some modification of it? It is recorded that so long ago as 1828 Sir Andrew Halliday proposed to copy the example of Gheel and to found a colony on one of the Middlesex heaths for the inmates of St. Luke's Hospital, London, and a second on the Midlothian plains for the insane paupers shut up in the Edinburgh Workhouse. Nothing, however, came of it. For many years in many European countries more than one asylum has tried some *annexe* cottage system within or without asylum walls, and though records of such reconstructive attempts are seemingly scanty, there is reason to believe that the results were largely successful. The Scottish system of boarding out, though personally unknown to me, has up to recent years, I believe, been eminently successful. In 1885 the Gheel system was started in Massachusetts to some extent, and though there was a good deal of opposition, the results were said to be quite gratifying. It was discontinued in 1888, but later revived through popular feeling refusing to abandon it. Whether or no it is still in existence I do not know. The reports on the International Congresses on Home Relief show that familial treatment has been in some way adopted in many countries and it is used now to some extent, though how much I am unable to say. The prevailing opinion that all insane must have institutional restraint, whatever the form of malady, has kept the Gheel ideal distrusted more or less for all time.

The main features of the Gheel system would be stated by its supporters to be—(1) Its naturalness as compared with that of public asylums. (2) The personal liberty which is enjoyed by the patient, and which must conduce so largely to his happiness and contentment. (3) The superior economy in treatment. (4) The economisation of the labour of patients for their own benefit medically and for those who support them pecuniarily. (5) The constant association of the insane with the sane and the humanising influence of the association of women and children. (6) The diffusion of the insane in separate dwellings as contrasted with barrack life in asylums. (7) The good effect towards recovery and the tendency to obviate early and advanced dementia. (8) The recognition of the important principle of individuality in treatment.

On the other hand the objections usually raised against the familial care system are that it is incompatible with village life in England and the habits of the people; that it would not be remunerative; that hardship and cruelty would spring up (as has occurred in some previous attempts) through defective organisation and supervision; that *nourriciers* would not be adequately found, and that in Gheel they have only grown up by tradition; and lastly that medical treatment would be hampered and

difficult. I shall not attempt here to examine or discuss these various points, which doubtless are highly debateable, and with which others are more competent to deal. Nevertheless I should surmise that the supposed impracticability of the adoption of some familial system in this country is much over-rated and founded largely upon conservatism, inertia, ignorance, and apathy.

It is quite true that the Gheel system is the slow and successive product of centuries, and that in a day one could not imitate it in England. It is therefore patent that society wants slowly but surely educating to view mental affliction in a very different light from the way it has hitherto. Probably no better education could exist than in the establishment of village colonies in every county in Great Britain, provided that the organisation was thorough. It is needless to say opposition would be met with on every hand, even from the medical profession itself; but in course of time the arguments against the system would be proved to be baseless, and asylums would only exist for those who by no manner of means could be looked upon as possible members of the social community, even under supervision. The psychiatrist under such a *régime* would have to be of a very different stamp from what he is to-day, because he will have to be trained to look upon mental abnormalities from a much wider sociological standpoint, whereas to-day he is centred more or less round the consideration and classification of certain symptoms from a scientific aspect, and that only.

On reflection there is less novelty than is supposed in some familial system. Some such principle was used prior to the erection of asylums, is even now in use where none are in existence, and in England to-day many patients are under private care. As has already been stated, in Scotland the boarding-out system has been much in evidence, and successfully so for many years, but seemingly without an efficient organisation to extend further and further. At any rate, some such scheme might be developed elsewhere, and, without the introduction of any revolutionary idea, be used as a useful half-way house from asylum to the world at large. Some familial colony need not replace asylums but could constitute an important resource and adjuvant, as much from the economical point of view as therapeutically.

It will be at once evident that I have only here touched the fringe of a deep and intricate problem, but my intention has been mostly to stimulate thought on a subject which from mere heedlessness and tradition has escaped the minds of those whose avocation in life is to further the progress of psychiatry in all its manifold branches. This period seems particularly appropriate to sift our time-honoured conceptions concerning the insane, since efforts at reconstruction have been and are now much in evidence, though largely, be it said, through the compulsion of public sentiment and not because of any inherent initiative on the part of the

psychiatric profession. We are such creatures of habit that the patent discrepancies in our asylum administration do not easily strike us. Without sufficiently realising it we are afraid of giving liberty in even a small measure to an individual who rightly or wrongly has fallen under the ban of a certificate of insanity, and the giving of parole to asylum inmates is jealously guarded. I can assure anyone that a visit to the Gheel Colony will make him ponder much, reconsider those viewpoints which have been mainly founded upon a limited mental horizon, and open his eyes to possibilities previously undreamt of. Modern teaching would tend to demonstrate that there is much more that is psychopathological in the so-called normal individual than is supposed, and there is much more that is normal than is supposed in the so-called insane. A great bane to progress in many departments of sociological research has been the grouping together of large classes and studying them as such. Thus we see the criminal, the feeble-minded and the insane viewed as special types, when in reality the variation in each is so great that the individual is seen to be more or less a study in himself. For the vast majority of us it is not feasible to conceive the question of treatment and environment adequately from the patient's point of view, but if we only can endeavour to do so our ideas concerning his care and place in society may radically alter, and for the better.

(¹) Not more than two patients are permitted to reside with one family.

Some Considerations in Psycho-therapy.(¹) By W. H. BRYCE, M.B.,
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IN a short paper of this sort it is possible to do no more than touch on a few points emerging from the consideration of the treatment of the psycho-neuroses. There are various methods of treatment based on equally varying theories; owing to this lack of uniformity on the theoretical side it is not surprising that doubt and confusion have arisen, and that, in the minds of some, the whole subject is regarded as chaotic. It therefore behoves one to go slowly, but to be prepared to use such means as experience, in any or all of the methods, has proved to be useful. The greater issues have been much written of and discussed, and in this search many of the lesser issues have been lost sight of.

The whole question of the position of psycho-therapy at the present moment is rather difficult, not as to results of treatment, but because of an absolute want of co-ordination amongst the various schools; nor would it seem that there is any possibility of unanimity until the various concepts are taken seriatim and judicially examined and appraised. Up

(¹) Paper read before the Scottish Division of the Medico-Psychological Association, November 19th, 1920.

to date the matter has hardly got beyond the stage of ardent discipleship to some particular prophet, with the usual consequence of seeing little good in the creed of any other. The rôle of simple persuasion and suggestion is not difficult to follow, for underlying neither of these methods need there be very much theorising as to treatment. With the milder analysing group there need not be very much argument ; but beyond this the troubled waters begin, for, as the basis of much of the therapy, there are many and various theories which are really the guiding principle of the particular schools in their methods.

Sidis says *fear* is everything ; Freud says *sex* is everything ; Alder, says the *feeling of inferiority* is everything ; and each that all things must be analysed back to his particular basis. Jung apparently postulates no one basal ultimate cause, but uses the conception of our divertable life-force or energy ; he differs from Freud in many ways.

Now, as in similar situations elsewhere, the next course will be either for one school to remain predominant, absorbing the others, or for an amalgamation and fusion to take place, embracing as much from each as has stood the test of utility ; and it almost seems that the latter will be the contribution of this country to analytical psycho-therapy.

Take, for instance, as evidence of this confusion, the various conceptions as to the unconscious in the human mind. Psychologically it is but a concept with no real worked-out data properly belonging to it. That there is a part of the mind which is the storehouse of psychic lumber, I assume, there is no doubt, but there is still no agreement about what it contains and what is its function.

The bottom layer of this lumber would seem to consist of the instinctive things and the native inborn tendencies ; they are there somewhere and their workings are not obvious or controllable. Added to this basis as life grows are various experiences which, for one reason or another, have proved incompatible with the ideas or ideals that have grown up in process of individual development ; these two Wallas has tersely called "natural" and "nurtural" respectively.

For one school the unconscious is very largely, if not entirely, composed of material which the personality has rejected and thrown back by repression into the limbo of the deep layers of the mind ; this material is partly the infantile tendencies which have been found to be incompatible with the new ideas, and partly certain later tendencies or impressions. These tendencies are generally connected with sex development and repression of sex in the wide acceptation of the term given to sex by this school.

Many misconceptions and much of the opposition to this school have been due to crudeness of statement, and to my mind greatly to the non-understanding of the connotation of sex given by the founder. As a single example of this take the difference in meaning to the individual

between the postulation of a sex attitude and a sex impulse, say to a parent.

The steps leading to the attitude are often several, but broadly the attitude is shown by the action and desires of the child always to stand well with that parent, with the incidental and consequent disregard of the other parent. All the child's actions are directed by the desire to appeal to the parent in question. There may be nothing of sex, *quâ* the reproductive function, but in what way does the attitude differ from that of adult attachments?

These infantile repressions would seem to be normal and universal processes, and to be due largely to the supposed fact that the infantile reactions are on one plane, namely pleasure-pain; the later reactions are on the plane of reality.

This school would seem definitely to pre-suppose that, to keep under the various desires or tendencies to action definite resistances have been set up, so that the outcome has been the postulation of the dynamic in mental process, the conclusion being that a constant energy of some sort is in existence, guarding the conscious mind from invasion by the ever-active forces in repression. This may be entirely latent until, from some cause or another, the imprisoned tendency tries to find expression, when the defence is at once awakened.

Another conception is that the infant comes into the world with a vast store of unconscious material ready to hand, namely the primordial thought-feelings which go back to the beginning of things, and which, I presume, are constantly growing in the same way as all other human tendencies. There thus seems from this point of view an evolution of the unconscious. To this domain of the unconscious belong the instinctive and inherent tendencies; from this part of the unconscious emanate all good and all evil, and it contains all the ultimate types of human thought reaction. The basis of conflict therefore may be entirely different in these two views.

This school also admits another element, the personal unconscious, which corresponds largely to the previously-mentioned conception of the first school.

Jung says the unconscious is the receptacle of all lost memories and of all contents as yet too feeble to become conscious. The academic psychologists have other ways of explaining the phenomena which have afforded the material for the construction of these conceptions.

As another instance of divergent opinions and as an outcome of the above, repression is looked upon in different lights. To the first school the unconscious is practically limited to repressed material, what has been valueless, painful or incompatible, and it is only with this that the school deals in its psycho-therapy. To the other school the repressed material is only a partial explanation for the phenomena—often only a

means to the further end, which may be anything. It may be that the real unconscious source of trouble does not lie in the repressed material at all, but that this repressed material is only acting as the hindrance to the full expression of a life. The dis-peace may not be due to all life's forgetting of unworthy things, but the hindrances and clogs hung about us by these repressed things may be the load that prevents us climbing where we really want to go.

Another conception is that the trouble is due not to sex or repression, but entirely to a struggle against the consciousness of limitations in the urge and desire for greater things, for fuller expression. All the forces in repression may be just those forces which militate against and prevent the full realisation of self. Simply a wrong direction given to life (possibly the result of accidental circumstances) and the struggle between the force of these circumstances and the almost inborn ideal may be the whole matter, and some see this as the basis of all the troubles, for to carry on in the wrong direction must needs involve the keeping under of other aspirations and ideals.

Another point still at issue is the necessity or otherwise of the unconsciousness of one of the two sets of factors involved. In the opinion of many there is no possibility of a neurosis unless one side of the trouble be either a deeply-buried matter in repression or some kind of unconscious urge for expression. It certainly often is so, but is it of necessity so?

It is an absolute necessity that one shuts down much that has happened, and also that one keeps from action and from thought much that is trying to be recognised or acted. It is on this line that all the biases of life are formed. We even erect barriers against belief in order to protect our biases. I do not believe that a thoroughly faced emotional happening will produce a neurosis. Frank fear with adequate cause cannot be a neurosis. Sexual acts *per se* do not give rise to nervous anxiety. But when, for example, the normal emotional reaction would be wonder, but instead of this fear is aroused, we are surely justified in looking afield for further causes or associations.

These causes have not of necessity to be dug out of the infantile part of life's repressions. Sometimes, of course, they are there, but one will constantly find these happenings in quite reproduceable memory. What has happened is that the association has either not been recognised, or, from the other point of view, has been neglected. Cause and effect have either been separated or have never come together in consciousness.

The outcome of these theoretical variants is, for the practical man, that there is probably truth to be got from all the sources, and in the meantime let us be prepared to gather what we can from all, for none of them are likely to be all right and none likely to be all wrong. Now

one will meet a purely Freudian case, again one where the fear in the case seems to be derived from purely fearful incidents, another where the fundamental struggle seems to lie with the deficiencies recognised by the self and the endeavours to overcome, and some which it is impossible to pigeon-hole at all, but—and this is the important practical thing—we cannot now do without the mechanisms and methods (most of which we owe to Freud), and we must not let our prejudice against the causative theories, nor yet the confusion and lack of agreement, prevent us making use of the mechanism and ideas, many of which help to an understanding of the simpler failures. And when all is said and done the simpler predominate.

From the clinical point of view there are various roads of approach just as there are various causal theories, but the one most generally useful as a sort of general basis is that for one reason or another the patient has failed to make some adaptation to immediate circumstances. This is most useful for a double reason: first, to elucidate the cause of failure, and secondly, to aid in the production of re-adaptation, for this is the job in hand—to help the man to adapt to his immediate environment or to certain sets of circumstances that which he cannot harmonise with his ideals.

The man who finds himself saddled with a conflict may deal with it in several ways. He may deal with it openly, faithfully and consciously, and in this way a solution will be found; so long as this course is pursued a breakdown is most unlikely to occur. On the other hand he may try in other ways to get peace; *repression* may come into use by one device or another in the endeavour to get rid of the un-pleasure, but in adult conflicts repression would seem to be but a poor resource for other than minor matters; for matters of much feeling a price has usually to be paid, and often in some form of neurosis. The repressions of childhood would almost seem to be the only really efficient ones—that is, when the whole body of experience, incident and emotion cease to exist in any form, as far as we are aware. Even the childhood-repressions frequently return in the aberrant form of psycho-neurotic symptoms. In adults, repression even in simple matters constantly fails, as shown in many an amusing or awkward mistake. In the big things the hopelessness of the effort and the partialness of the success, as well as the price paid, were constantly seen in the war cases.

A point that Rivers makes in his book would explain this greater efficacy of childhood repression. His proposition is that the effective repression (what he calls “suppression”) is an unwitting thing belonging to the instinctive domain, and therefore more potent in childhood. The adult effort may be a witting thing, and its failure in that case be due to the attempt to do wittingly what can only be effectively done at the level of instinct. The less witting it is the more potent it will be.

Repression to complete amnesia of incidents, or of whole periods of life, cannot be called symptomless, because, apart from the lack of integration, so much else than the affective incident has to go as well, and also in affairs of moment much energy has to go in keeping these matters from consciousness.

A certain element of repression may be useful at times, but to my mind it is only successful if along with it other outlets are found for the emotion at stake.

We may take three other possibilities of attaining peace or comfort :

- (1) Sublimation.
- (2) What one may call, for want of a better word, "cover."
- (3) The neurosis.

In sublimation the forces or emotions aroused or desiring expression are diverted into some other channel sufficiently allied to give them expression, or of sufficient interest and intensity to act as a by-pass.

What I have called "cover," on the other hand, cannot act as a by-pass or diverting agency, but simply—and generally temporarily—overlies the trouble. There is no hard and fast line to be drawn between these two measures, but in treatment it is of the greatest importance to recognise the distinction. Alcohol is one of the crudest forms of "cover" and can never do other than cover ; it is only a temporary alleviation or let-up.

Occupation-therapy comes in here ; work simply as work is, in my experience, of little avail until and unless real interest is aroused, for through interest an emotional outlet may be attained. Work often does little more than alcohol, and it is with work that the gradation between cover and sublimation is best seen. The man who takes furiously to work in an attempt to overcome his neurosis might just as well take to drink, except that it is a more socially desirable means and also a more constant "cover" ; but let the work arouse real interest and emotional outlet and much may be got from it. The woman who takes to slumming ceases simply to cover her trouble, and begins to sublimate it so soon, for example, as real pity is aroused. Occupation, therefore, is rational therapy, and to be employed always provided the conditions necessary are fulfilled.

The third solution is the onset of a neurosis, or at least what may be called neurotic reaction to the situation.

Psycho-therapy deals, not only with the abstract and complicated, but much more often with the simple and every-day troubles ; but though this is so and though it may be said that there is little new in the treatment of these simpler conditions, it is certainly a gain to bring these things into line with the more grave conditions as much as possible without distorting the facts or complicating the treatment ;

however simple the fault, a definite conception of it—especially if it at the same time points the way out—can only be a gain.

Non-adaptation to the immediate circumstances or requirements is seen in its simplest form in fruitless worry. The dictionary does not help one much, except that the original meaning is to strangle, but I *do* know that it is no good telling one to desist from worrying. We know that something has to be done, some situation has to be met, but beyond that we do not go in our minds. The urge of the situation is there, but we refuse to let it free in the only possible way that will carry us forward. Worry leads nowhere, and the attempt to get rid of the situation will be unsuccessful. The situation still remains, and so does the urge to produce a change; the resultant emotional state is one of worry.

In worry the subject is up against some proposition or situation with which he cannot deal efficiently; he has failed to adapt to the particular circumstances, be these outside or inside himself. Instead of efficient thought or thought-action there is a vain repetition of the situation leading to a single idea, which is simply the *fact* of the situation, and it is this absence of directed thought that is responsible for the un-pleasure in the feeling tone; worry is, in fact, a paralysis of thought and action—they are strangled. Produce adequate thought around and in connection with the matter and worry will cease as such. The piling up of responsibilities and of work only produce worry when and if we cease to feel that we deal efficiently with them—when they strangle us. If worry is not relieved by the appropriate thought or action, fear is apt to become predominant in the emotional reaction with the greater abnegation of thought, and it is in this condition that egregious actions are produced and the danger of a definite neurosis is threatened.

The reasons for the wrong reactions to the circumstances are, of course, innumerable, but at the bottom of them all is the desire—more or less conscious as the case may be—to avoid some source of unpleasantness—something unpleasant which will have to be brought to the surface if the matter is gone into.

So resistance of one kind or another comes into play to try and stifle the urge to get rid of the situation. If these resistances had been efficient the subject would have been dismissed from the mind at least temporarily, but all they have achieved is to focus attention on the central core of the experience and so throw everything else into darkness—the shutting out of thought. Worry, therefore, may be looked upon as a failure of repression, though not a complete failure, and the price paid is the un-pleasure produced. The treatment is to completely lay bare the conditions and experiences responsible, and to produce thought and, if need be, action, leading out of the experience. But the thought must be germane to the experience, for the only way to drain a bog is

to dig ditches from it. In the process one will have worked along each resistance as it presents itself until thought or action is released.

The habit of worry has so far the same basis, though it might be looked upon more in the category of a mood, and the immediate incident has little enough to do with the matter as a causative factor. It is a very difficult condition to bottom in extreme cases, as its construction is much the same as those of purposeless and multiple fears.

Yet another important factor in this maladaptation idea is the permitting of inadequate reactions, instead of the requisite efficient response, to result from a definite motive. This is constantly to be seen, and in the simple hysterical cases is fairly obvious. The motive here cannot be one recognised as such in consciousness, else would the patient be a malingerer and not an hysteric, but the purpose served is often too obvious to allow of any other conclusion. In a recent case, after having cleared most of the trouble, I asked the patient for a motive: it was repudiated. Later I asked what had been gained by the illness and was promptly given a long list of gains, when the motive was, of course, laid bare. This question of recognition of motive is of great importance not only in definite treatment, but also as one factor in the prevention of relapse. It is by no means always an easy thing to lay bare, as misunderstandings are apt to arise, but it has to be gone through. The motive as a motive has to be accepted by the patient and the adaptation to the situation realised. A patient may be relieved of physical symptoms such as pain, sickness or any invalidism and be apparently in good health again. Let this patient return to the old surroundings with the same exciting causes for the hysteria still operating, and the chances are that a relapse will sooner or later occur so long as the motive is not laid bare and accepted by the patient; and in prophylaxis, if the patient has accepted the motive, something else will have to be found for a real relapse, but the pitfall here is that it is but seldom that an hysterical illness is singly motivated. One main motive may be got at and accepted, but disappointments follow because there are others less obvious or important, and one must therefore be on the look-out for hints of these. It is not easy at times to make the point, and I have known the issue robbed of success by a too abrupt making of the point, though the clearing up of motive is seldom the whole matter, it is a valuable point in many cases.

There is also the practical side to the necessity or not of invoking the unconscious whenever one is dealing with a neurosis. Here the trouble of definitions at once comes in. The symptoms may be due, not to a burial, but simply to a non-recognition of cause and effect, as previously mentioned, between the symptoms and the disturbing cause. Take hysterical pregnancy symptoms, for example. Here the

effect is anything from morning sickness to a phantom tumour, and the cause is frequently the extreme desire for pregnancy. Bring cause and effect together in consciousness to the extent of belief and the symptoms terminate. The mere statement of a pious belief, however well backed, will not be sufficient to produce relief. The symptoms can only exist so long as the two ideas—the positive one of pregnancy and the extreme desire for pregnancy—are unrecognised in the true position; without the separation, it is obvious there would be no symptoms.

I remember a young officer, who had nightly a terrifying vision, which was simply of an officer in uniform. Subsequently he described to me one of his superior officers, of whom he rightly stood in great dread. The description of the vision and the reality were identical, but there was no conscious recognition of cause and effect.

But is it sufficient simply to clear up the morning sickness or phantom tumour and leave the case there? In most circumstances it is not; for surely the fact of the symptoms arising shows something is amiss that needs inquiring into if further trouble is to be avoided. There are some jarring notes somewhere which will have to be rearranged to produce harmony and to prevent disharmony again appearing. It is not just easy to place this idea of cause and effect: it would not seem to quite come under repression, because both are fully in consciousness in the cases under discussion—often, of course, cause is *not* in consciousness—but at the same time it is certainly an element in repression. In the case of the vision it would appear to have been a result of the endeavour to repress, and yet it was so ineffective that it is not easy to see the purpose served, except the removal from the plane of painful reality.

Another important aspect may be looked at from the same point of view of separation of cause and effect in consciousness; I refer to the persistence as physical symptoms of what can be traced as a residuum of the physical manifestations of an emotion. This is most common when the emotion has been frequently aroused, or perhaps more correctly when it has persisted for long. Whatever view one adopts as to the relation of the bodily signs of emotion to the whole emotional process—whether one trembles because one is afraid, or is afraid because one trembles—does not seem to me to matter in this connection. A sudden profound emotion with accompanying profound somatic physical symptoms or sensations may also have its remainder in the form of symptoms of physical illness, especially if it has been a rude awakening. These are, I think, most commonly shown in abdominal symptoms, though frequently the heart or sometimes the function of respiration is affected: “hope deferred maketh the heart sick.” Fear, disappointment, apprehension, and the hoping against hope all produce uncomfortable abdominal sensations—diarrhoea and frequent micturition are common phases. The sudden or profound awakening, without gratification, of

sex emotion is very apt to persist in physical symptoms if a neurosis arises.

It is only the non-recognition of these as remainders that enables them to persist as hysterical symptoms. The treatment, of course, obviously is to connect up again cause and effect with conviction to the patient.

Another small matter that is often of importance is the interchanging of emotions ; this perhaps is best seen in the case of fear and the sex emotion, "though frequently also in wonder and fear." In many of their somatic manifestations fear and sex are extremely similar. In many cases without a neurosis, but still more so within a neurosis, they have been aroused at one and the same time and by the same external stimulus. The recognition of the connection between these two emotions is not new, though of course Freud has brought it into the lime-light by his separation of anxiety neurosis and hysteria from other neuroses ; and one frequently meets cases entirely in agreement with Freud's description. Freud says the psyche merges into the affect of fear when it perceives itself unable to adjust to an externally approaching task (danger) ; it merges into the neurosis of anxiety when it finds itself unable to equalise endogenously originated (sexual) excitement. That this happens in certain cases there is no doubt. The reason of the fear is the question. Is part of the connection between fear and sex not due to the similarity of many of their manifestations, and to the fact that fear so frequently accompanies the arousal of sex emotions, fear being in fact many a time the only defence ? I recently had a case in which the two emotions were so intimately connected that they were not separated as individual entities. I believe that many phobias are constructed on this basis. The fear is quite unreasonable and inadequate to the occasion which is the apparent exciting cause, that cause being some sex association—it may be quite remote.

From these few considerations of the simpler problems and mechanisms it is but a gradual transition to the most pronounced manifestations of neurotic conflict—the major hysterias, phobias, compulsions and obsessions. The same problems have to be faced, the same mechanisms are evident, and it would seem rational to suppose that the same open-mindedness as to causative factors and theories of production should be preserved.

The man who is unprepared to see the purely sex causation, even if it arises out of childish repressions, the man who is unwilling to recognise the workings of the inferiority complex, so called, as his basis, or he who is so deterministic in his view-point that he will not allow the teleological or purposive factor in the neurosis, is to my mind going to have to adapt the case to his views and not his views to the case. And what is more, many cases can only be fully understood by a combining

of more than one view-point, for without the whence the object of the whither can often not be seen, and without the recognition of the whither the whence is of little value, and also at times disappointment will come for want of recognition of the inferiority factor in character formation.

On the Possibility of a Biological Conception of so-called Functional Nervous Disorders. By G. H. MONRAD-KROHN, M.D.Chris., M.R.C.P.Lond., Censor and Lecturer in Neurology at the Royal Frederic University, Physician in Charge of the Neurological Section, Rikshospitalet, Christiania.

SURVEYING the enormous material of observations of psycho-neurosis during and following the war, it looks at the first glance as if the old distinction between organic and functional nervous disorders has been more firmly established than ever. To most writers this distinction seems to be a fundamental one, and the majority of those nerve specialists, whom the war has developed in such abundant numbers, seem content to regard the distinction (which before the war was being regarded with increasing suspicion) as a permanent one—the primary distinction in the classification of all nervous disorders. It has even been suggested that the two groups should be studied and treated by two different classes of specialists—to my mind an arrangement that would represent a most effectual barrier to any further development of psycho-neurology.

It is my aim in the following lines to prove that the distinction between organic and functional disorders is unfounded and misleading, and to show that a biological conception of the functional disorders is possible.

The distinction is already logically a bad one as the “organic” disorders are also functional in their clinical appearance, *i.e.*, it is only through their functional disturbances that one can recognise them clinically.

Whilst thus we have to admit that the “organic” disorders are functional, we have no foundation for the belief that the so-called functional disorders are not organic in an anatomical respect. On the contrary there is every reason to believe that they are. The only thing we know is that they are as a rule unaccompanied by organic changes so gross, that they can be discovered by the means of anatomical investigation—macro- or microscopical—at present at our disposal. But here it must be emphasised that our anatomical methods are very crude and highly inadequate.

When studying an elementary vital process such as vital deoxygena-

tion and oxygenation (cell respiration), one finds that this, presumably one of the most elementary vital processes of the cell, has been lost, when the neurobions (Mott) have conglomerated into Nissl bodies. It is obvious then that all sorts of functional disturbances of the vital functions of the nerve-cell may occur in consequence of biological changes, which belong to what may be called the pre-Nissl stage of destruction.

The histological investigations on which our neurological anatomical knowledge has hitherto been founded have practically all referred to the post-Nissl stage of destruction, and the images we thus study are all of them only "equivalent images," to use Nissl's own term, *i.e.*, images that are in no way identical with the protoplasmatic arrangement of the living cell. Just as Heller's nitric acid test shows that the cerebrospinal fluid contains proteids, in the same way the Nissl method shows that the cell contains certain elements which seem necessary to its functions; but how these elements are arranged in the living cell the Nissl method shows us no more than Heller's test tells us how the proteids are suspended or dissolved in the cerebrospinal fluid.

Till we find reliable methods of studying the pre-Nissl stages of cell degeneration, we have obviously no right to deny the possibility of organic changes. [The methods of *intra-vitam* staining may probably throw further light on the pre-Nissl stages of cell change (Marinesco, Mott and others), but at present our *intra-vitam* biochemical methods of investigation are only in their childhood, and we must wait for further development.]

It has also to be kept in mind that functional nervous disorders practically never lead to an early death, and thus rarely afford opportunity of a *post-mortem* investigation. In this respect they may be put in the same class as a simple catarrh of the larynx. Its functional manifestations—hoarseness increasing to complete aphonia maybe—are obvious enough, though of very short duration. Equally obvious are the visible organic changes. A *post-mortem* examination carried out perhaps years afterwards shows no traces whatever, and yet one would not hesitate in regarding the hoarseness as the result of an organic lesion—catarrh of the larynx. In this case we can *intra vitam* satisfy ourselves as to the existence of hyperæmia, increased secretion of mucus, desquamation of epithelium, etc. The fact that the central nervous system, on account of its anatomical situation, is not accessible for such direct inspection *intra vitam*, does not exclude the possibility and probability that similar changes of a transitory but decidedly organic nature take place in its different parts.

Thus the transitoriness of the "functional" disorders may well be compatible with an organic lesion.

The stumbling-block of a biological conception of the functional

nervous disorders has always been the fact that most of the manifestations may be cured by suggestion, often in one sitting. This is generally considered incompatible with the assumption of a definite morphological lesion, however slight and transitory.

In order to debate this point more thoroughly let us first consider a few well-known anatomical and clinical facts.

The motor paths of the nervous system form a very complicated network: only from the anterior horn-cell is the path single ("the final common path," to use Sherrington's expression). As soon as we get above the anterior horn-cell we find several motor paths through which impulses can be transmitted to the final common path (e.g., the pyramidal tract, preponderating only in the higher mammals, the rubro-spinal tract, the vestibulo-spinal, etc.).⁽¹⁾

In accord with these anatomical facts we find that a central motor lesion is never complete, *i.e.*, motor function is never quite extinguished: a certain amount of reflex activity and combined movements are nearly always to be found.

Now the higher the level, the more numerous alternative paths are at the disposal of the impulses. If we study motor disturbances due to lesions of the eupratic area of the cortex—apraxia, motor aphasia—we often find that the disturbance seems to disappear under the influence of emotion (Hughlings Jackson), *i.e.*, the impulse is under the influence of emotion passed along alternative paths of communication.

All re-education is based upon the existence and utilisation of alternative paths along which the patient may learn to send the impulses.

Even in a gross organic lesion such as tabes, certain stages of the re-education,⁽²⁾ which here mainly consists in substituting visual control for the control by deep sensation, are sometimes achieved so quickly that suggestion could achieve no quicker improvement. And sometimes in poliomyelitis, when the peripheral destruction is not complete, a few *séances* of re-education with strong application of the patient's will may act as quickly as suggestion, which, it must be remembered, does not always cure in one *séance*.

Now is it not admissible to regard suggestion as a quick re-education? The "functional" disturbances mostly have a more or less "psycho-genetic" stamp, which leads one to suppose that the lesion must be situated at a high level of the central nervous system. The higher the level, the more numerous the alternative paths at disposal as substitutes, the more easy and the quicker the re-education.

But what about the *origin* of the functional disturbances? In very many cases one cannot avoid the assumption of a causal relation of the functional manifestation to some psychic factors—an emotional shock (denied by Babinski), a strong suggestion (auto- or allo-suggestion).

Surely this is incompatible with a biological conception?

We all agree that a change in the morphological constitution of an organ is capable of determining a corresponding change in the function. But how is it with the converse? Can and must not an alteration in function cause a corresponding change in the morphological constitution of an organ? In one individual we see a certain muscle enormously hypertrophic on account of increased function; in another we see a marked thickening of the skin of the palms in response to hard manual labour; and as regards the pharynx and larynx we encounter conditions resembling catarrh as a result of prolonged shouting. Surely we have to admit that the morphological status is to a great extent conditioned by the function.

Now as regards the nervous system, we have still more reason to believe that function is very active in its moulding. In the experimental physiology of the nervous system we become acquainted with a process of "facilitation" and a process of "blocking" which must not be forgotten. When an impulse travels along a certain path, the resistance in that very path is diminished for subsequent impulses coming the same way. On the other hand, when the path of this impulse is crossed by another simultaneous impulse, the impulses generally tend to block the way for each other. It is obvious that these processes, which can be demonstrated experimentally, depend on biochemical changes and not on psychical factors.

Now if a strong emotional impulse on account of a certain chance constellation of other simultaneous impulses has caused an untoward motor reaction—*e.g.*, a spasm or a contraction—a whole system of facilitation and blocking will obviously be brought into play, with a tendency for subsequent similar stimuli to cause similar motor response on account of facilitation, or similar motor loss on account of blocking.

It is therefore quite possible to explain the "psychogenic" origin of "functional" disorders along physiological lines. But personally I am not convinced that the functional manifestations so frequently (if at all) are the result of a strong psychic influence. As regards emotional shock, it is, I believe, much the same story as with the exposure to cold or a trauma, which the patients always hold responsible for any disturbance which occurs within a year or two after (or sometimes before). Medical men should not be too credulous in this respect.

Finally, one may ask if there are any clinical findings pointing to the fact that "functional" disorders are organic, and not solely the outcome of suggestion. In this connection I shall only mention the finding of the abdominal reflexes in hysteria. I have had ample opportunity of satisfying myself that an inequality in the abdominal reflexes corresponding to a slight difference in sensation over the two halves of the trunk is one of the most frequent findings in hysteria.⁽³⁾ That

such a reflex change could possibly be the direct result of any suggestion seems to me incredible. Surely some organic changes in the reflex arc must be responsible for this.

We arrive, then, at the conclusion that the "functional" disturbances are in all probability dependent on transitory, high-level lesions of organic nature; that these may possibly sometimes be the result of faulty functions (thus indirectly the result of psychic influence) but probably more often not; that suggestion in these cases is but a form of re-education; and that thus there is no fundamental gap between functional and organic disorders.

(¹) The sensory system shows a similar arrangement.—(²) *E. g.*, the process of teaching a patient to rise from the sitting to the standing position.—(³) *Cpr.* Monrad-Krohn, *Abdominal Reflexes*, Christiania, 1918.

Part II.—Reviews.

Collected Papers on the Psychology of Phantasy. By Dr. CONSTANCE E. LONG. London: Baillière, Tindall & Cox. 1920. Demy 8vo. Pp. xii + 216. 10s. 6d. net.

Dr. Long has collected certain lectures given by her between 1916 and 1920 into one volume. Some of these were delivered to various teaching and child-study societies, or printed in journals devoted to these matters. Others were addressed to the Psychical Research Society, International Congress of Women Physicians and similar associations in which the greater part of the audience could not be deemed to be experts in the subject of psycho-analysis. These facts must be borne in mind in reading these lectures, which are presumably meant to be taken as introductory in character, and for this reason any detailed criticism is hardly called for.

The authoress is a faithful follower of Jung, and there is a strong temptation to describe in detail the differences between her views and those of Freud. Space forbids this, but one or two matters must be mentioned. Jung, as is well known, will not acknowledge the "censor" of Freud, and yet we find on p. 21 the following: "Other contents are prevented from ever becoming conscious by the strength of the barrier set up between the conscious and the unconscious by our resistances, which may be conventional, or cultural, or moral." Why not call it a "censor" and have done with it?

Jung's concept of an "impersonal" or "collective unconscious" is a valuable addition to Freud's "unconscious," but the authoress is surely not right when she states on p. 20 that "Freud attributes it [the unconscious] entirely to repression." In *Delusion and Dream* (¹) Freud writes: "The 'unconscious' is the broader term, 'repressed'

(¹) *Delusion and Dream*, by Dr. S. Freud, translated by Helen M. Downey, M.A., p. 178.

the narrower. Everything that is repressed is unconscious, but we cannot assert that everything that is unconscious is repressed." Dr. Long is not altogether to be blamed for her error, as it occurs in the writings of some who consider themselves orthodox disciples of Freud.

The title of the book rather invites criticism, as it leads one to expect a monograph on the subject of Phantasy only; but the authoress gives her reasons in the preface, and certainly with the numerous collections of papers on psycho-analysis her task to find a suitable name was not an easy one.

This review should not close without bearing testimony to many valuable hints in these essays with regard to the best way in which to deal with the nervous child, or with children who are disobedient and revolt against discipline. This is a subject which is slightly mentioned in much of the literature. In discussing such a child Dr. Long relates the amusing story: "Two little girls were at their mother's garden party. The Bishop's wife noticed them, and asked them their names. To their parents' annoyance the elder answered 'Sodom,' and the younger instantly chimed in 'And mine's Gomollah.'"

Dr. Long has an easy and clear style, and the repetitions which are unavoidable are, as mentioned in the preface, no great disadvantage. The volume may be recommended as a safe and agreeable introduction to the study of the "Analytical Psychology" of Jung.

R. H. STEEN.

Anatomie des menschlichen Gehirns und Rückenmarks auf myelogenetischer Grundlage. By PAUL FLECHSIG. Erster Band. Leipzig: Georg Thieme, 1920. Demy 4to. Pp. 121, with 25 plates and 8 figures. Price £1 6s. 8d.

To neurologists and alienists, who regard the recent "new psychology" as merely a temporary though brilliant disturbance in a small field of the subject, which has in the past been liable to abnormal manifestations, the appearance of the first part of a long-delayed volume which deals with ascertained facts rather than with theories is certain to be welcomed.

When Flechsig in 1896 published his *Gehirn und Seele* and promulgated the generalisation that the cerebral cortex could be divided into centres of projection and centres of association, it was rapidly appreciated that a great advance had been made in our knowledge of the cerebral functions. The fact that much of his earlier evidence required subsequent modification in detail did not detract from the importance of a generalisation, which during the first decade of the present century was definitely established by the researches of other workers as the fundamental basis of our knowledge of the cerebral functions.

It is, however, characteristic of the racial mentality of Flechsig that he should laboriously by his personal method carry out to its completion and verification his special evidence—that derived from the varying dates of myelinisation of the numerous tracts of fibrils which constitute the white matter of the nervous system—and that he should for practical purposes ignore the researches of others, which have for so many years

been tending by different paths towards the same goal. Brodmann, for example, in his elaborate and painstaking researches into the geography of the cerebral cortex of man and other mammals, in a similar way limited himself strictly to his anatomical findings, ignored the related anatomical and pathological researches of other workers, and therefore logically refrained from drawing any physiological deductions from his results.

The work under review must therefore be regarded solely as a definite personal monograph of personal anatomical work accomplished. This attitude of the author towards his researches, though unusual in this country, in some respects adds to rather than detracts from its value; and the definite opinion may be unhesitatingly expressed that no neurological library, however small, which does not possess a copy of this work, can be regarded as representative of its subject.

The present and first part of the work is divided into two portions: the former of these deals with the special method employed, with the myelogenesis of the various cortical fields, with "myelogenesis and pathology," and with the author's general observations and conclusions; and the latter gives a short but clear description of the twenty-five very beautiful plates, and has appended to it a complete list of the published papers of the author, arranged in chronological order from 1872 to 1912.

The general description of upwards of fifty myelogenetic cortical fields, illustrated by the diagrams on p. 12, may be regarded as a summary of Flechsig's final word with regard to the various centres of myelinisation in the cortex; and it should be remarked that his later work has produced such modifications of his original statements as have now resulted in a general agreement with the conclusions arrived at by the critics of his earlier results. This is well shown in the figure on p. 41, where the author indicates on his own diagram (fields 1, 4, 4b, 4c, 7, and 7b) the various areas of precentral electrical excitability according to F. Krause, and where he places the "Tastsphäre," or projection area for general bodily sensibility, on the anterior half of the postcentral gyrus (cortical fields 3, 3b, and 6). In this respect alone the replacement of the *Gehirn und Seele* by the present volume is amply justified.

To praise or to criticise the final work of a master would be an impertinence. It suffices to recommend it as one of the most important contributions to our knowledge of the structure and functions of the nervous system that has ever been published in any language.

J. SHAW BOLTON.

Psychology and Psychotherapy. By WILLIAM BROWN, M.A., M.D.(Oxon.), D.Sc.,(Lond.), Reader in Psychology in the University of London (King's College). London: Edwin Arnold. 1921. Crown 8vo. Pp. ix + 196. Price 8s. 6d. net.

The aim of this volume is to indicate the psychological principles underlying the modern theory and practice of psychotherapy. Part I deals with the process of dissociation. The theories of Jung and Freud are briefly described, and an account is given of the author's method of treatment by "hypno-analysis"—a method of treatment which, in suitable cases, he has found to yield results equally good as and quicker than psycho-analysis. The clinical forms of dissociation are briefly

described and an abstract is given of Morton Prince's cases of multiple personality. Part II is theoretical and consists of three chapters mainly devoted to an account of Freud's theories of dreams and the unconscious. Parts III and IV are devoted to psychotherapy, and the author describes his treatment by *autognosis*, as also his theoretical views on the process of emotional revival, a subject to which he has given considerable attention. He provides an account of the results of treatment in cases of war neurosis, and describes in detail the successful treatment of a case of paranoid dementia præcox by the method of autognosis. We wish that Dr. Brown had given us a more complete and convincing account of the case. Many patients of this type of course make a fair re-adjustment and "recover," but we cannot help feeling a little doubtful as to how far the recovery in Dr. Brown's case was actually due to argument, persuasion and the explaining of delusions. The only satisfying account of the analytic dissolution of a paranoid psychosis is that given by Bjerre, and the whole question is so important that full details are desirable. It is unfortunately contrary to our knowledge of the attitude and reactions of these cases to find success attending an explanatory method of psychotherapy. Dr. Brown does not put the matter quite clearly, but his account reads as if unlocalised hallucinations were present up to the termination of treatment. We feel, though, that however hopeful the possibilities of psychotherapy may or may not be in these cases, Dr. Brown has done well to bring into prominence the necessity for an intensive individual approach in dealing with them, because it is certainly our experience to find that such patients are definitely appreciative of any real attempt to understand their point of view.

In Part V the author discusses the relation between mind and brain, and gives an excellent *résumé* of the theories which have been erected to explain this difficult problem. He makes particular reference to Bergson's interaction theory, with which he finds himself in agreement, and in calling attention to *Matter and Memory* he has undoubtedly cited a work which the psychopathologist will find well repays the most careful study.

Throughout his book Dr. Brown devotes much attention to Freud's theories, and he discusses more particularly these theories as summarised in the final chapter of the *Traumdeutung*. He is no doubt correct in stating that no one can justly claim any insight into the theoretical and psychological aspects of Freud's work unless he has fully mastered the contents of this chapter. It is these views as therein expressed, however, which many psychologists find so much intellectual difficulty in accepting. Very few experienced neurologists or psychiatrists would be disposed to deny that the psychoses and psychoneuroses of civil life are often the expression of some maladaptation in the sexual sphere. The relation of hysteria to the sexual development at adolescence was pointed out by Dr. Mercier in 1889 in that little masterpiece, *Sanity and Insanity*, in the clearest possible way, but he could scarcely be regarded as a Freudian on that account. It is not the emphasis which Freud has laid on the importance of the sexual life which is so much the subject of criticism, as the highly schematic, analogical, and animistically phrased conception of mental functioning

upon which his system is based. It is his *pansexualism* rather than his sexualism to which many take exception, because his theory would seem to necessitate the artificial distortion of facts which are capable of other interpretations, and ultimately to reduce human activity to the expression of one biological need. The stress which Dr. Brown lays on the more theoretical aspect of Freud's work is perhaps the most characteristic feature of his book, and most of his readers will no doubt agree with him that it is to the fundamental conceptions of the Freudian system that attention and constructive criticism should be directed.

H. DEVINE.

The Story of the Horton (County of London) War Hospital: Epsom.
By Lieut.-Colonel J. R. LORD, C.B.E., M.B., Officer Commanding.
London: W. Heinemann (Medical Books), Ltd., 1920. Demy 8vo.
Pp. 264 with 7 plates and a plan. Price 12s. 6d.

It is not a particularly easy task to present such a mass of administrative detail as this book contains and at the same time make it interesting to the general reader. Col. Lord has managed, however, to achieve this task, and has written an essentially human and readable book. He tells us of his difficulties and how he met them; he records his doubts, fears and trepidations; he gives in a few happy phrases his impressions of the numerous distinguished visitors to the hospital; and he lets us into various little secrets.

The first part contains an account of the general history of the hospital from the time it was first proposed to take it over for military purposes, early in 1915, up to 18th February, 1920, when the first batch of mental cases returned. An excellent and detailed account is given of the work and administration, and throughout this section Col. Lord expresses his sense of appreciation of the work done by the staff and the numerous voluntary helpers who interested themselves in the work of the hospital. He seems, indeed, to have remembered everyone. It is quite certain that such a large undertaking could only have been carried through successfully by the loyal co-operation of the staff with their commanding officer. The magnitude of the work is apparent from the fact that 44,613 patients were treated in the hospital, and that at one time there were as many as 2507 occupied beds.

Part II is concerned with an account of the special sections of the hospital's work. It comprises descriptions of the various medical and surgical departments and their organisation, statistical matters, chaplains' department, army education, recreations, transport, finances, and the honours and awards granted to members of the hospital staff. The medical and administrative details provided under these headings will be found of considerable interest and value.

Col. Lord states in his preface that one object he had in writing this book was to enable former patients to have in their possession some memorial of the hospital with which they were so closely associated. The book will naturally have a peculiar interest for the staff and former patients of the hospital, but there are various reasons which would lead to the hope that the volume may reach a wider circle of readers. It is just as well that the public should be enlightened as

to the work which was accomplished in mental hospitals during the war—and the work at Horton, which Col. Lord has taken so much trouble to recount, was paralleled in twenty-three other asylums—because it may lead them to reflect with increased understanding upon the work carried out in these hospitals in normal times. We are probably justified in feeling that our mental hospitals made an adequate contribution to the care of the wounded during the war—and not only the War Hospitals but the unconverted asylums had a long and severe struggle in circumstances of extreme difficulty. This was of course only as it should be, and the work done was expressive of the efforts made in all directions during the years of the war, but it is much to be desired that the public should realise that a similar organisation is devoted to the care of those patients who are normally treated in these hospitals. We are glad that Col. Lord stresses this point and writes, "In the struggle for existence against disease, poverty, adverse circumstances, and all forms of physical and mental stress, there is a never-ending battle in progress with its stricken and wounded, even its dead; and the conversion of an asylum, where those broken in mind and often in body seek refuge and relief from their suffering, into a war hospital, is after all a change in character rather than in substance; both are founded on the same great principles."

The author states in the preface that any profits which accrue from the sale of this book will be devoted to the erection of a memorial in the hospital chapel on behalf of those members of the staff who fell in the war.

H. DEVINE.

Functional Mental Illnesses (*The Morison Lectures*, 1920), by R. G. Rows, M.D.; and *The Interdependence of the Sympathetic and Central Nervous Systems in relation to the Psychoneuroses*, by DAVID ORR, M.D. (Reprinted from the *Edinburgh Medical Journal*.) Edinburgh: Oliver & Boyd, 1920. 8vo. Pp. 64. Price 3s. 6d.

By "functional mental illnesses" we are here to understand "hysteria, psychasthenia, neurasthenia, the phobias and obsessions, melancholia, manic-depressive conditions, epilepsy in many instances, paranoia and the so-called dementia præcox." These, says Dr. Rows, are all secondary products—secondary to emotional states depending on conflicts produced by some experience or series of experiences occurring in the life of the individual. Primarily there is an altered affective state, produced by an unbearable idea, and resulting in a disturbance of the capacity to perceive, to think, to feel, to judge, and to act. This disturbance produces a condition of anxiety—of dread as to future developments of the illness. The patient now seeks for an explanation of his condition, and, lacking real knowledge of mental mechanisms, is open to suggestion; he adopts as a possible explanation ideas which to a superficial observer may appear bizarre and absurd; he is apt to attribute his disability to causes or agencies which he would not accept as adequate if he were in a normal condition. The type of result produced will depend not only on the suggestion adopted, but also on the mental tendencies the patient has developed from the time of birth onwards,

and on the sensitivity and reactivity of his nervous mechanisms. During the primary stage recovery is possible in the great majority of instances if not neglected. Treatment consists in discovering by a process of exploration the experience or experiences by which the emotional state was produced, and in then explaining to the patient the mental mechanisms concerned.

The authors give an excellent general survey of the somatic phenomena and physiology of emotions, and the interactions of the central and sympathetic nervous systems and endocrine glands. Dr. Rows reminds us of the resemblance often observable between the phenomena of mental illness and the phenomena of conditioned reflexes as studied by Pavlov experimentally in dogs. To illustrate this resemblance he describes a number of clinical cases, in each of which the patient recovered when the mental mechanism was explained to him. The case of a man who, on hearing the noise of a tin can falling, passed into a state of terror, because it had been a practice in the trenches to beat a tin can as a warning of a gas attack, is likened to that of Pavlov's dog, in whom the sound of a bell caused secretion of saliva, the bell having been customarily rung when food was given.

If, as we trust, this book will lead to a wider study of the somatic phenomena of mental illness it will serve a useful purpose—a purpose which some readers perhaps may think it would serve better if it gave any instance in which the newer physiological knowledge was of service to the authors as an aid in diagnosis, prognosis or treatment. The original cases reported are all of a type long recognised, and are here interpreted on the well-worn lines of the old psychology of the association of ideas, not essentially modified by the psycho-analytic doctrines, to which a reference is made. From the accounts given of these cases we could not tell that any sympathetic nervous system or endocrine gland existed; nor can we discover that the treatment used and recommended by Dr. Rows differs in any respect from the psychotherapy employed by many regardless of the physiology of these organs. The pages dealing with this physiology present to us a large mass of information, extraordinarily interesting in itself and certain to be very useful eventually, but not here shown to be at all assimilated to psychotherapeutic practice. It is surely very noteworthy that two such authors, of great psychiatric experience, and deservedly honoured for their very substantial contributions to neuropathology, should indicate no way in which this new physiology that they discuss can be applied to the psychotherapy of the illnesses concerned. For this absence of application we cannot blame the physiology, nor can we blame the authors; the fault lies with the doctrine of psychotherapy, which, not being of a scientific nature, cannot assimilate scientific knowledge. And indeed, when we reflect, we must wonder how an explanation of mental mechanisms should of itself have any efficacy, whether as preventive or as cure, of mental illness.

The word "kinæsthetic" (κινέω) is used in several places where "cœnæsthetic" (κοινός) seems to be intended.

SYDNEY J. COLE.

In Search of the Soul, and the Mechanism of Thought, Emotion and Conduct. By BERNARD HOLLANDER, M.D. Vol. I: "The History of Philosophy and Science from Ancient Times to the Present Day." Vol. II: "The Origin of the Mental Capacities and Dispositions of Man and their Normal, Abnormal and Supernormal Manifestations." London: Kegan Paul, Trench, Trübner & Co., Ltd. New York: E. P. Dutton & Co. 1920. Royal 8vo. Vol. i, pp. 516; vol. ii, pp. 361. Price £2 2s.

When Adam and Eve ate of the Tree of Knowledge and thus transgressed, a curse was upon them for their sin. Concerning the nature of the anathema—which was their portion as well as the serpent's—there has been dispute. If we may speak facetiously of so sombre a matter, it was an instance of making the punishment fit the crime—for their abstraction of the apple mankind has had to suffer from abstractions ever since! The track of civilisation is strewn with many butchered propositions, but there are still plenty of "Homoiousians" waiting—and, as a rule, not having to wait long—for doughty opponents. In the first place these abstract terms meant something, more or less, to those who invented them. Even in religion—in its early stages—there were grotesque images which could be gazed upon with seemly reverence. Gradually, however, the tendency arose to veil the image from the eyes of the common herd, who became unduly familiar towards what was so obviously an aggregation of "mud and stone." In process of time it was found that it did not matter whether the idol was in the penetralia or not. The people believed that it was there, and, as they no longer saw it, they brought their imaginations to bear upon the problem. With the aid of the medicine-men they arrived at some passing strange conceptions. Succeeding generations, instead of investigating the matter for themselves, added their own little bit of fancy. If you would see the monument they have raised, you have only to look around. You will observe also that the decorative effect is of a striking roseate hue—not the tint of early dawn, but the blood of martyred opponents.

I am inspired to these not—apparently—very relevant thoughts by the perusal of Dr. Hollander's erudite volumes, wherein he has set himself the task of collecting all the theories adumbrated as to the seat of the soul. It will occur to many—who are not of the elect—that his efforts must partake of the character exemplified in the pursuit of the *ignis fatuus*, or in the endeavour of the strayed reveller to catch his own shadow. For is there a soul? Or is the term not one of those abstractions already adverted to—a gratuitous hypothesis invented by ignorance, by intellectual indolence, or by overweening assumption of knowledge? In so far as Dr. Hollander's book is concerned it is really a matter of indifference, except that his title is likely to be misunderstood by some people who will infer that he has embarked upon shoreless seas of theology. If so they are quite astray, except that, as in any history of scientific endeavour, they will find incidental mention of the almost constant effort on the part of the theologians to oppose the progress of reason by argument and by more material means.

In the first place Dr. Hollander gives a historical summary of the various systems of philosophy from the earliest times down to the

present. It is really a history of the evolution of human thought with, of course, special stress on that portion of it which deals with theories as to soul and mind. The task of summarizing the writings of the philosophers is no slight one, but it has been done concisely and succinctly. In the section dealing with primitive religion it is a pity that reference has been omitted to the work of Tylor and of Frazer—to mention no others. The suggestion is made in no cavilling spirit, but rather to draw attention to the fact that, for the most part, Dr. Hollander has given an ample supply of references; so that, even for this alone, his book will prove of value to those who wish guidance in consulting original sources of information.

But this book differs from the ordinary histories of philosophy in that there is correlated with the purely philosophical portion a history of the theories of the causation of insanity, and, as a necessary appendix to this, information as to the various methods of treatment adopted in the matter of mental disorders. Along with these there are accounts of the witchcraft superstition and of epidemic delusions as a necessary adjunct to any complete study of the history of insanity. Dr. Hollander here does less than justice to Wierus, that enlightened physician, who, greatly daring, opposed the prevalent superstition of his time and pointed out that most of those accused of diabolical practices were really suffering from mental disorder. He appears to have been the first person of intelligence and position who had the courage to do this. (His name was John, not Julius as given here.) And Dr. Hollander omits altogether our own countryman, Reginald Scot, whose *Discoverie of Witchcraft*, published in 1584, is a land-mark in the history of the witch-delusion. It would be more remarkable, however, if it were not possible to find some errors and omissions in a work which covers so vast a field, and it gives a flattering unction to the reviewer to be able to find out something Dr. Hollander has overlooked! Were it not so one would be inclined to say of him what was remarked of Andrew Lang: "He is not a man; he is a syndicate!"

The progress of research on the nervous system, and especially on the brain, forms one of the most practical—as it will be to some—and one of the most interesting parts of the work. We pass from the conception of the cortex cerebri as a homogeneous structure—a view strongly held by many and one which it was heresy to doubt—to that which regarded it as differentiated into cells and fibres with more or less specific functions. The controversy as to the localisation of speech receives much attention; and the whole matter of the possible allocation of mental functions to particular areas is discussed at length. Here, as in his *Mental Functions of the Brain*, Dr. Hollander brings forward a mass of clinical evidence to support the contention that it is possible, broadly, to do for these higher functions what has already been attempted—and perhaps achieved—in the case of speech.

The hidden springs of character and conduct so earnestly sought for by the modern school of psychologists, and by the psycho-analysts in particular, are investigated, and an endeavour is made to synthesize a science of ethology. Not that Dr. Hollander is a dogmatist in this direction. He realises that much work yet remains to be done before we shall arrive at such a stage that we can make definite and positive

statements regarding all the mechanism of thought, emotion, and conduct.

In many ways these volumes are a worthy and fitting monument to the memory of a great and much maligned man, Francis Joseph Gall. It is easy to see that Gall is to a great extent the source of Dr. Hollander's inspiration. Most of us have been brought up on the shibboleth that Gall was merely a "bumpologist" whom we, in the superiority of our knowledge, can dismiss with contempt. It is a silly superstition, but the vitality of a superstition seems to be in direct relation to its absurdity! It is made quite clear—yet once again—that Gall was not only an able theoriser, he was also a competent observer, and he collected facts with the diligence of a Darwin. The phrenological theories are the least part of what we owe to his assiduous toil, and he would, were he alive, probably be one of the first to agree with this statement, especially as, in any case, much of what has been credited to him in this respect never emanated from Gall, but has been foisted upon him by ignorance and antagonism. Also it was his followers who were so much more apt than he to let their theories outrun their facts. In any case it may be said that no one is competent to criticize Gall until he has read carefully Dr. Hollander's account of his life and work.

Enough has been said to demonstrate that Dr. Hollander has produced a sound and stimulating book. If it does not lead us to a definite conclusion to our search that is not a matter for criticism in so far as the author is concerned—it is a difficulty inherent in the subject. Perhaps Dr. Hollander is too much inclined to limit the scope of scientific investigation. Anything we can know of or form any conception of must inevitably in time be subjected to research to the limit of our powers. The "unknowable" is something—if words mean anything—of which we can have no knowledge; even that it exists at all is surely beyond inference? But, spelt with a capital, it has an imposing appearance, and capital letters are great assets to the metaphysically-minded!

HUBERT J. NORMAN.

Spiritualism and the New Psychology: An Explanation of Spiritualistic Phenomena and Belief in Terms of Modern Knowledge. By MILLAIS CULPIN, with an Introduction by Prof. LEONARD HILL. London: Edward Arnold, 1920. Crown 8vo. Pp. 159. Price 6s.

It is our boast that we are a civilised people and that we may, therefore, look with pity—if not with contempt—upon "the heathen in his blindness" who "bows down to wood and stone." We have left him far behind, for have we not the spread of education and consequently much enlightenment? Superficially this appears to be so; and so it seemed to the dominant peoples in the past that they had reached a culminating point in culture and in rational belief. Yet a consideration of the past should make us humble when we remember how even the great minds were not exempt from error and from credulity. It seems as if the only true believers were the sceptics—a quite Chestertonian paradox—but nevertheless it is a point of view worthy of consideration. Unfortunately when the true believers—people governed by their emotions—had done with the equally true believers in something else, they

turned their attention to the sceptic and treated him with a little of the usual medicine. It usually had a little boiling oil in it : we manage to escape to-day with a dose or two of liquid, but unheated, paraffin. If there is one thing we have gained it is freedom of expression. So Prof. Leonard Hill and Dr. Culpin will have nothing more than anathemas to fear from the irritated Lodgers and the disgruntled Doyleys—two of the most prominent sects in the new Revelation. Otherwise they might find themselves subjected to the persuasive methods which were adopted in the case of Galileo: for they deal shrewd blows at popular superstitions. The weight of authority and the ability to invoke the names of distinguished men are almost negligible as arguments in support of any belief—using the word in the sense of creed. The New Testament embodies in its teaching the belief in demoniacal possession as a cause of insanity. Sir Thomas Brown was convinced of the truth of diabolical influences in witchcraft, despite the vulgar errors and—*longis intervallis*—Sir Oliver Lodge, Sir William Crookes, Sir A. Conan Doyle, and others, believe in spiritualism. But, as Prof. Hill remarks in his introduction, “the few eminent scientists who have expressed their belief in spiritualism are mostly physicists, *e.g.*, Crookes, Oliver Lodge and W. Barrett—men who have not made a life-study of physiology and nervous disorders, who are not familiar with the attainments and methods of conjurers and professional impostors, and are shielded in their laboratories and home life from close acquaintance with human deceit and cunning. Their familiarity with the transmission of waves of energy through dead material and through space leads them to concepts which cannot justly be applied to living things. To the physiologist, who recognises the majestic unity of natural phenomena, belief in telepathy and spiritualism appear a form of materialism as gross as the ju-ju superstition of the Benin native.”

Of course the phenomena of spiritualism were sure to catch it sooner or later from the psycho-analysts. When you have got hold of a good-going theory it is wonderful what you can do with it. And here is one that can explain apparently the heavens above, the earth beneath and the waters (of the unconscious) under the earth. So Dr. Culpin goes for spiritualism armed with his complexes, repressions, dream-analysis, conflicts, etc., and deals it many well-directed blows. What one feels about psycho-analysis is that it explains everything a little too glibly. The history of thought does not seem to teach that short cuts to knowledge have been so easily discovered. On the other hand this new system is not so new in its entirety as many people with circumscribed information seem to think. However, that by the way; and it does not need to be inferred from what has been said that Dr. Culpin has used his weapons to no purpose. The fact is that the spiritualistic position is by no means impregnable even from different points of attack. Clodd and McCabe in recent times have shown that; while there is still interest and information to be derived from “Sludge the Medium,” as Dr. Culpin rightly comments.

Consciousness is a comparatively recent product in evolution; and it is, too, a “stream” made up of many and varying components, some of which, instead of emptying directly into the main channel, may run parallel with it and only communicate with it indirectly, both

streams, however, being under control. Or there may be two streams only one of which is controlled; the second is the one which gives rise to such phenomena as we see in automatic writing, water-divining, and hysteria. Thirdly, the streams remain dissociated but the main stream may be entirely replaced for a time by the subsidiary one, and then there results "double personality," somnambulism and spiritual trances. The first is a normal phenomenon; the second is designated "continuous dissociation"; and the third "abrupt dissociation." This theory is skilfully applied by Dr. Culpin to explain the various so-called "spiritualistic" phenomena. Believers in the preternatural origin of these will, of course, deny the validity of his conclusions. Dr. Culpin realises this, for man at the present stage of his evolution is still hampered in his efforts towards rational thinking by the force of emotion and by the fact that he has so many "logic-tight" compartments. This will prevent them from realising that his is an honest effort towards an "increase of knowledge (not about the supernatural, but about the ways of the human mind)." HUBERT J. NORMAN.

Treatment of the Neuroses. By ERNEST JONES, M.D.Lond., M.R.C.P. Lond. London: Baillière, Tindall & Cox, 1920. Demy 8vo. Pp. viii + 233. Price 10s. 6d.

Now that the attention of the public has been drawn to the question of psychotherapy, especially through the lay press, it is all the more important that the physician should acquaint himself with the main principles of the subject. In order to accomplish this it is by no means sufficient to consult the medical journals: the divergent views therein expressed, advocating different methods and combinations of methods for dealing with the neuroses, can only tend to confuse and bewilder the uninitiated.

The present volume supplies just what is needed. It contains all the essential points in psycho-pathology and psychotherapy and, though space does not allow of any detailed exposition of psychological procedures, the book should prove useful both in the treatment and in the prevention of the neuroses.

In his former works, notably in his *Papers on Psycho-Analysis*, Dr. Ernest Jones has shown himself a staunch defender of the Freudian faith, yet he has had extensive experience with all the main methods of treatment. He has devised a scheme ("activity criterion") for classifying the countless modifications of psychotherapeutic methods into three chief groups, *viz.*, suggestion, re-education and psycho-analysis, according to the extent to which the patient himself actively participates in the mental changes taking place. Thus in the suggestion group the patient passively waits while the change in mental function is brought about by the personal influence of the physician. In the re-education group the idea of the physician still plays the major part; the patient is here, however, asked to assist in the treatment by recalling certain traumatic experiences which have become dissociated from consciousness. In the psycho-analytic method it is the physician who assumes a passive attitude, the patient himself being called upon to take a much more active part in the synthesis of the pathogenic complexes.

In order to render the various therapeutic procedures more intelligible a short account is given of the theories on which they are based. For example, in the suggestion method the symptoms are regarded as being caused partly by suggestion, but mainly by various internal wishes and strivings which have something of a dynamic nature. The treatment consists in opposing to this internal force an external force, *viz.*, the personal influence of the physician. Suggestion, therefore, means an interplay of forces, and the result depends on the relative strength of each. According to the re-education theory the symptoms are the result of definite psychical traumata on a defective mental constitution—the memories of these traumata being repressed (amnesia). The treatment consists in reviving the unpleasant memories, thus linking up the dissociated mental processes with conscious ones. The author draws attention to the fact that this procedure is not sufficient in itself, but that it has invariably to be amplified by other methods, especially suggestion. This is due, he says, to the insufficiency of the exploratory means at the disposal of the workers belonging to the present group. The psycho-analyst agrees with the theory that the symptoms are built on a series of mental wounds, but he disagrees with the view that the pathogenic effect of the trauma is due to its having acted on an unstable mental disposition. According to him the second factor is provided by various unfulfilled wishes and strivings which have their origin in infancy and early childhood. The energy pertaining to these primitive desires enters into conflict with certain inhibiting forces—standards of education, religion, etc.—and as a result of this conflict the desires become repressed and buried. They do not die, however, but succeed in manifesting themselves in one of two ways: (1) in the healthy individual they find expression in useful activities; (2) in the neurotic they lead to the formation of symptoms. The third view of the psycho-neuroses is thus seen to incorporate both the “traumatic” and the “wish” hypotheses in one. The psycho-analytic treatment aims at releasing the energy which is made manifest in the symptoms and diverting it into useful channels. This cannot be accomplished merely by the revival of a few ideas and traumatic memories; but the investigation must be continued until all the repressed, buried wishes, which constitute the original pathogenic factors, have been brought to light and completely assimilated in consciousness.

According to the author the most widely-accepted psychological explanation of the war neuroses is the shock theory, on which the treatment by re-education is based. Many of the cases tended to recover spontaneously. At present the more refractory ones are being treated by all the methods mentioned above, and there is a decided tendency on the part of the workers in this field to adopt the more radical modes of treatment.

Although this work is chiefly concerned with psychological treatment, physical measures are recommended when the ætiological factors are predominantly physical in character, as is the case in the “actual neuroses.” If, in future editions, the author were to include a chapter dealing with the treatment of the neuroses resulting from auto-intoxication, the usefulness of this exceptionally interesting little book might be still further enhanced.

Brief reference is made to the question of State prevention of the practice of psychotherapy by any but qualified medical practitioners. It is a pity that Dr. Ernest Jones and other eminent specialists in this branch of medicine do not make known their views on this all-important subject.

NORMAN R. PHILLIPS.

Standard Method of Testing Juvenile Mentality by the Binet-Simon Method and the Porteous Scale of Performance Tests: A Uniform Procedure and Analysis. By NORBERT J. MELVILLE. With an Introduction by WILLIAM HEALY, M.D. Philadelphia and London: J. B. Lippincott Co. Second edition. Crown 8vo. Pp. vii + 162. Illustrated. Price 12s. 6d.

This book comprises in a very handy form full directions and a large part of the necessary material for carrying out the tests of mentality associated with the names of Binet and Simon. The author provides a uniform method of procedure, which permits of the examination being abbreviated without very material impairment of the validity of the results obtained. The tests are arranged in series of one for each age, and the examiner, as a preliminary, tests the subject by his response to the question "What is this," on being shown a picture. From this mental level the subject may provisionally be reckoned at either 3, 7 or 15 years. The subject is then given the test in the (*a*) series for the year next above the level thus obtained, and the (*a*) test proceeds year by year until a failure occurs, when the (*b*) test for the preceding year is tried. If he succeeds (*b*) tests are given until he fails, thence with the (*c*) group, and so on. If he fails with the first (*b*) test the observer proceeds in the reverse order until a test is passed, when the (*c*) test for this age is tried, subsequent tests passing up or down the scale as indicated by the results.

In this newer and enlarged edition there is included full directions for the use of the Porteous maze tests, which are rapidly coming into use as accessory tests of very great value for certain aspects of social life. The Porteous test consists of a series of printed mazes, through which the subject has to draw a pencil so as to get out by the quickest route, making a fresh beginning on a new sheet after intentionally crossing a line, finishing a wrong attempt or beginning to retrace. Two trials are allowed below the age of 11 and four for the older ages with more complicated designs. The mazes have been graduated so that the large majority of children should be able to trace their way through the design corresponding to their chronological age. The correlation between these tests and the Binet tests is very high.

The chief criticism of the maze test is that some improvement undoubtedly follows practice, so that their repetitions for the purpose of subsequent examinations is not so reliable as the original tests.

Melville also provides a scheme for brief introductory testing of subjects in the later years of childhood, or over school age, by giving the Porteous tests and two of the Binet tests for the age of eight. These must be given carefully in accordance with the exact directions, when, if failure occurs, a provisional diagnosis of subnormality to an extent worthy of further investigation is made. If the eight-year-tests are passed

the observer proceeds to corresponding pairs in higher years. Melville points out that the Binet test age is more significant as an indication of capacity to profit by school instruction, and the maze test as an indication of fundamental ability to meet simple situations in daily life. He considers that if the subject is failing in school or life but passes these tests to age, or on the average of the two to an age over 12, he should not be classed as mentally subnormal.

The object of the book is to provide a uniform procedure for psychological or social workers, who make preliminary studies of cases before they are brought to a medico-psychological laboratory or clinic for complete investigation. They thus serve a purpose of preliminary weeding out. Unlike some enthusiasts the author gives a warning that the Binet test age is a convention to be interpreted in the light of all available data, and is not an exact expression of the mental age of the subject. He concludes that none but specialists in mental and physical disorders should make a diagnosis of mental retardation.

The little volume also contains data on the limits of physical dimensions usually compatible with normality, and a section on clinical interpretation culled from the works of Binet, which will be read with appreciation by all.

F. S.

Part III.—Epitome of Current Literature.

1. Psychology and Psycho-Pathology.

The Essentials of an Education. (Ment. Hyg., April, 1920.) Paton, S.

The essentials of an education are: (1) a knowledge of actual life; (2) a definite impelling interest in some phase of life; (3) the recognition from actual experience of one's own capacity and limitations of adjustment; (4) the acquirement of the emotional attitudes and habits necessary for perceiving and adapting to reality. These ensure against nervous breakdown, but are not synonymous with modern education, which views the problems of man as he was or may become, not his reactions as he is. Life is a process of slow adjustment, and must be accepted as it is. If elemental biological facts are not faced squarely serious personal difficulty arises. Conflict to the point of mental depression can be so met as to preserve sound personal judgment on public questions. Individual conscious processes are not so essential to adjustment as is believed: decision is made from well-grounded feeling, often not from reason which can be logically detailed. An outstanding example is Abraham Lincoln, whom science cannot explain by his heredity or early experiences. Successful life implies consciousness of the reality of environment, and avoids the visions of intemperate idealism. The student is not taught to know himself, to estimate the present, and to intelligently adjust to immediate circumstances. Hence the many graduates of highest distinction who are subsequently failures, being finally seen in hospitals, reformatories, prisons or asylums. The numbers in insane institutions are more than those in colleges or universities.

The child is often taught to "dodge reality"; spoiling extends to adolescence; he at last takes refuge in academic environment or philosophy, and "suppressions" result. Efforts toward compensation narrow the channels for the emotions, distort mental vision, and misshape the personality. Sensitiveness with feeling of superiority cause withdrawal from the social "herd"; criticism becomes a slight; cynicism appears. These are a defence against reality, and may determine enthusiastic radicalism, ardent pacifism with "conscientious objection" (a symbol of the personal peace desired but not attained), or an "intellectualism" which decries the modern thinker as a "revivalist." Apology for defect and a constant personal "grouch" may occur, recognised by (a) the replacement of facts by symbols, (b) vague expression where there should be concise and accurate statement of fact, and (c) protective reactions embodied in emotion and intellect. The personality is disorganised; quixotic pleading for tolerance and liberal-mindedness is co-existent with intolerance of the common-sense values of life. In aiding forces of reaction they find outlets for the release of personal tensions due to "conflicts." In this group are also academic mystics, sensation-mongers, supporters of "jazz-journals," "who display an ebullience of misdirected emotion and incoherent thought" (Ghent). Formal education requires the realisation of two biological principles—(1) innate personal dispositions which cannot be changed, but should be employed to best advantage; (2) the needs thus created should acquire satisfaction by gaining adjustment to reality. A scheme of investigation is adduced and suggested for embodiment in the educational system, where it postulates the intelligent direction of every student individually. Particular emphasis is laid on the *commencement* of each of the three important epochs, as here briefly indicated. (1) School period: General physical and emotional characteristics, whether learning by ear, eye, or with assistance of muscular system; fatiguability, mental and physical. Motor adjustments are correlated with the conscious processes. The present system suppresses intelligent curiosity, which should be preserved. (2) High school: As (1), also rate and character of development, femininity or masculinity; home instruction in sex hygiene to be supplemented and clearly presented, destroying half-truths which disorganise personality; detection of imperfect emotional adjustment or the shunning of reality. Are situations frankly met which cause embarrassment or perplexity? Special aptitudes or interests should already be indicated. (3) College or university: As above; reasons for entry, dominant purpose or "drifting"; personal creativeness (observation, reproduction, pertinence). Presence of "wishful thinking"? Actuality replaced by imaginary situations? Well balanced personality and comprehension of culture? If disturbances, extent and nature of compensation reactions.

The chief duty of the teacher should be to estimate the individual's adaptive capacity, and to assist its successful development. The teacher's personality is of particular import: he must be trained in discovering and analysing the foundation forces of character. Von Moltke declared that the Prussian schoolmaster won the Franco-Prussian War by his influence on the national life: this upheld

autocracy. Can democracy develop a superior type of teacher who will rightly direct the essential factors of character and temperament, thus establishing in personality the foundations of democracy and of lasting peace? On this biological view the teacher becomes a recognised leader in the determination and security of civilisation.

JOHN GIFFORD.

Organ Inferiority and its Psychical Compensation. (Summary of Adler's Monographic Study.) (*The State Hosp. Quart.*, November, 1920.) Haviland, H. C.

In beginning the study of organ inferiority, Adler starts with the consideration of the urinary apparatus. The ætiology of renal disease is obscure. In cases of genuine or primary kidney disease the final cause cannot be traced beyond the kidney. The nephrotoxic theory (scarlet fever, etc.) fails because we know of no poison which attacks the kidney and at the same time only the kidney. The theory that the kidneys are more prone to disease because of their function as excretory organs fails also. Why is it that, with bacteria in the blood, with chronic metabolic anomalies, with alcoholism, pregnancy, or chill, the kidneys are so often found healthy? We are, therefore, forced to the third view—that most renal diseases are caused by a fundamental inferiority of the urinary excretory apparatus. One of the strongest arguments for this theory is heredity. In many cases it becomes questionable just where the aspect of disease begins for us. It is necessary to pursue the theory as regards many, if not most, diseases. Can the inferior organ by treatment be aroused to sufficient function and to additional development? Often it can in young people, often it cannot in older patients.

Why do certain diseases just attack a certain organ? The hypothesis accepted is that there is a primary inferiority of this organ as a basis for the disease. Tuberculosis is probably always localised in an inferior organ. So also are diphtheria, pneumonia, typhoid, cholera, and dysentery. At the same time the part the bacterial invasion plays is not denied, though many pathogenic organisms can be demonstrated in well people. He therefore drops this conception of "absolute" inferiority for these widely spread diseases, and introduces the term "relative" inferiority.

(1) *Morphologic inferiority*.—The shape, size, and individual proportions of tissue, individual cell complexes, of the whole or limited parts of the apparatus may be deficient. Thus one of the individual's organs has to perform necessary functions with a lesser stock of tissue and one less capable of resistance, and the hour comes when the insufficiency of the organ is revealed. Fœtal defect is due to heredity or prenatal influences, and the same or different organs may be affected. Organic inferiorities close to the surface have passed up to to-day under the name of stigmata. Manifold inferiority may occur extending through several organs.

(2) *Functional inferiority*.—This consists in a quantity or quality of work insufficient to satisfy a standard of required effectiveness. Shock of any sort, infections, exhaustion, overwork of a bodily or psychical nature, disturbance of temperature, will usually show their effects. We

therefore find in cases of disease that the bulk of it is concentrated on the inferior organ. Normal organs are compensated less by hypertrophy and more by hyperfunction, inferior organs undergo hypertrophy to maintain their normal function. It is only a step from excessive growth to neoplasms occurring in such organs. The development of carcinomas is preceded by a number of years of functional disturbance or further disease of organs. A confirmation of this theory can be drawn from Cohnheim's carcinoma theory of scattered embryonic germs. A significant light is thrown on the nature of organ inferiority by the frequent phenomena of manifold inferiority in the organs of a person and the part played by the brain and spinal cord in connection with it, which frequently act compensatingly and cover the existing defect and sometimes shape it to useful ends. Heredity therefore consists in inheriting one or more inferior organs. Adler cites moral deterioration, criminality, chronic alcoholism, as arising from inferiority of brain in the progeny of epileptics. An organ may be found quite healthy but inferior owing to heredity. If the case be traced back to childhood a functional deficiency will be found which existed before compensation was established. A fault of childhood in relatives should be regarded as a suspicious sign of inferiority of the organ at fault. The psychical structure formed by the reflection of the inferior organ on the psyche becomes a foundation for neuroses and psychoses. Often organs of a slight inferiority may develop greater functional capacity than normal organs because of the compulsion of constant training in the capacity for adaptation and variability, often adhering to inferior organs, and surely also in the development of related nervous and psychical complexes, heightened by an inner attention and mental concentration upon the weaker organ.

The part played by the nervous system is important. Manifold organ inferiority extends itself to sectors of nerve-tracts of the central nervous system. Inferior organs incapable of compensation fall victims to more rapid or slower destruction. On the other hand, Nature may compensate and make them quite capable or even more capable at times. Between the extremes are mixed formations which have not been completely compensated. It is from this group that neuroses and psychoses develop. Functional and morphologic formation of the organ and its nerve-tracts will make the inferior material functionally capable as in normal development, partly as a result of stimulus, partly owing to continued effort. Ordinarily the central nervous system will play the largest part in compensation not only physically but psychically, for the reason that a particular interest seeks to protect the inferior organ from harm by constant attention. If such organs are not controlled by a surplus from the central nervous system but at its expense, the overwork will be lastingly felt, and on suitable occasions chance causes will produce a disturbance of compensation which will result, according to the degree of disturbance and the psychical constellation present at the time, in neurasthenia, anxiety and compulsion neuroses, and hysteria.

If there is a particular retardation of the organs as well as the related nerve-tracts such conditions as idiocy and imbecility result. The mastering of children's defects points to compensating activities

in the superstructure. Childish defects really represent lines of direction from the life of the psyche, and are signals indicating peripheral or central inferiority which has not been overcome. We can always find attentiveness of the central superstructure proportionately distributed on the part of the normal organ, disproportionately distributed and increased according to the organic over-compensation in the inferior organ, more easily aroused but less productive by reason of unsuccessful compensation, insufficient or absent in cases of lasting central inferiority.

This work refers all phenomena of neuroses and psycho-neuroses back to organ inferiority, to the degree and nature of the not quite successful central compensation, and to the compensatory disturbances which enter into the matter.

W. J. A. ERSKINE.

2. Neurology.

Pupillary and Reflex Disturbances in 275 Cases of Neurosyphilis.
(*Journ. of Nerv. and Ment. Dis.*, August, 1920.) Lowrey, L. G.,
and Benedict, Mary K.

In this study of all cases of neuro-syphilis seen during a year and a half, only those cases were utilised where the presence of neuro-syphilis had been proved. The clinical diagnoses were: general paresis, 186 cases; tabo-paresis, 12; tabes, 8; juvenile paresis, 4; neuro-syphilis (not further specified), 65. The authors did not find that the Argyll-Robertson pupil occurred in every case of tabes and tabo-paresis; 43 *per cent.* only of paresis, tabo-paresis, juvenile paresis and tabes showed the phenomenon. Of the whole series 40.7 *per cent.* reacted in this way. Impaired pupillary reaction was found in 71.3 *per cent.* of cases—40.7 *per cent.* Argyll-Robertson; 11.7 *per cent.* spastic and 8.3 *per cent.* sluggish both to light and on accommodation; 10.5 *per cent.* with impaired reaction not further specified—leaving 28.7 *per cent.* of cases in which the reactions were normal. Inequality and irregularity of pupils were common. Irregular pupils are of more diagnostic import than unequal pupils, since the number of possible causes is less. These abnormal reactions do not inevitably mean neuro-syphilis, as the Argyll-Robertson pupil temporarily occurs in alcoholics, the completely spastic pupil in arterio-sclerosis cerebri, unequal and irregular pupils in iritis. Too much reliance, therefore, must not be placed on the pupils in neuro-syphilis, especially in view of the 29 *per cent.* of normal pupils in cases of paresis.

In 70 *per cent.* of the cases some type of abnormal tendon reflex response was found. All cases of tabes and tabo-paresis and 70 *per cent.* of the paretic cases showed some reflex disorder. The knee-jerk showed an alteration in 43 *per cent.* of all cases, and in 41.7 *per cent.* of paresis. A lost reflex was more commonly found than an exaggerated one, contrary to the usual belief. These findings show the importance of lumbar puncture in the diagnosis of mental and nervous diseases, as neither the presence nor the absence of pupillary and tendon reflex disturbances is sufficient to determine a diagnosis.

C. W. FORSYTH.

The Static and Kinetic Systems of Motility. (Arch. of Neurol. and Psychiat., October, 1920.) Hunt, J. Ramsay.

In this presidential address to the American Neurological Association, Hunt develops the hypothesis that in motility there are two components, each represented throughout the entire efferent nervous system by separate neural mechanisms, mutually co-operative yet physiologically and anatomically distinct: a kinetic component concerned with movement proper, and a static component concerned with tonus, posture, and equilibrium.

Two such distinct kinds of motility are observable even in lowly organisms. We may contrast the rapid rhythmic kinetic movement of cilia with the static aspect of the changes in shape of an amœba. In some invertebrates the two forms of motility are subserved by separate muscles; the shell of a bivalved mollusc is made to close by a rapidly acting striated muscle, and is kept closed by a slowly acting non-striated muscle. In higher animals both functions are united in the same muscle-fibre, and in man all gradations may be observed, from the lowest type of non-striated to the highest type of striated fibre. The striated fibre contains two substances, both contractile, one being the disc mechanism, which executes the quick movement or twitch, and the other the sarcoplasm, which yields a more plastic form of contraction, permitting an alteration of length without a corresponding change of tension. Each muscle-fibre has a dual innervation—by a medullated nerve-fibre whose motor end-plate furnishes the stimulus for the disc mechanism, and by a non-medullated accessory sympathetic fibre controlling the sarcoplasm. Reflex action is dependent on a peripheral kinetic system terminating in the disc mechanism; reflex posture on a peripheral static system terminating in the sarcoplasm.

Extending from brain to muscle are two great motor systems, one subserving a palæo-kinetic and the other a neo-kinetic function. The corpus striatum is the palæo-kinetic centre for the control of automatic and associated movements, and the Rolandic area is the neo-kinetic centre for dissociated movements of cortical origin. The thalamic portion of the palæo-encephalon is associated with the cortex by afferent and efferent tracts, by which palæo-kinetic motility may be directly controlled from the cortex (cortico-thalamo-strio-spinal system). In contrast with this is the neo-kinetic system—a direct path from the Rolandic cortex by way of the pyramidal system to the anterior horn cells of the cord, and thence to the disc mechanism.

The central mechanism for the control of reflex tonus and of the sarcoplasmic function of the muscle-fibre is the cerebellum. Just as we have recognised palæo- and neo-kinetic systems, so we find also palæo- and neo-static systems. The palæo-static system takes origin in the older nuclei of the vermis, the neo-static in the dentate nuclei of the cerebellar hemispheres. Their efferent paths proceed by the superior peduncles to the red nucleus, and thence descend as separate systems in the spinal cord (palæo-rubro-spinal and neo-rubro-spinal systems), and so to the sarcoplasm of the skeletal muscle-fibres.

Paramyoclonus multiplex, myokymia, and fibrillary twichings are spasmodic phenomena referable to the kinetic spinal mechanism; myasthenia gravis is a paretic manifestation. The clonus of spastic

paralysis is of neo-kinetic origin, the tremor of paralysis agitans palæo-kinetic. Huntington's chorea and epilepsy are both kinetic, the former being striatal, the latter cortical. All forms of myotonia are sarcoplasmic, referable to the static system, as is also the tonic rigidity of tetanus. The coarse movements of intention tremor are an effort of the kinetic system to compensate the loss of the postural or static functions of the sarcoplasm.

In addition to such various somatic expressions of kinetic and static function, we find indications of a similar division of function in the mental sphere; we may mention catalepsy, catatonia, and certain hyperkineses of psychic origin. It is therefore possible to trace the evolution of the static and kinetic systems of motility from the lowest to the highest levels of the neural mechanism.

SYDNEY J. COLE.

On Deep Localisation in the Cerebral Cortex. (Journ. Nerv. and Ment. Dis., April, 1920.) Van't Hoog, E. G.

In 1909 Ariëns Kappers inferred from his studies in comparative anatomy that the neo-cortex has two functionally different zones: an outer or supragranular (layers 2 and 3 of Brodmann), associative and receptive; and an inner or infragranular (layers 5 and 6), predominantly corticofugal and commissural. Between is the granular layer (4), which is receptive, and consists of cells whose axons are too short to form corticofugal fibres. Layers 2, 3 and 4 are all receptive and associative, but whereas 4 establishes intracortical connections at a short distance, 3 establishes connections at a much greater distance. Kappers suggested that 4, as matrix of 3, might merge with the latter. After separation of the cortex from the subcortical centres, the upper layers retain some capacity for growth but the lower layers atrophy (Nissl, 1911). In the infragranular pyramids the corpus callosum has its origin (van Valkenburg, 1910).

[In 1907, Dr. G. A. Watson, of Rainhill Asylum, working on Insectivora, had already pointed out that the infragranular layer has projection and intraregional associative functions. The still earlier pathological and ontogenetic studies of Dr. J. Shaw Bolton on the human species (1900, 1903) have also important bearings.—S. J. C.]

If with a small animal we compare a large animal of a nearly related species (for example, the lion with the domestic cat), we shall expect to find in the larger animal—if Kappers' inference is correct—a very pronounced increase of the supragranular cell-layers; for not only is there, with an increase in body-bulk, an increase both of receptor and of effector functions, but, as was explained mathematically by Dubois, receptor functions increase with bulk more than do effector. Van't Hoog has measured the thickness of the cell-layers in the postcentral region of the cortex in pairs of species of apes, semi-apes, cats, bears, dogs, ungulates, rodents and marsupials—the species being so selected as to contrast a large with a small representative of each group. His drawings, diagrams and tables are very impressive. His measurements show that in the larger animal of each pair there is not only a much greater increase of the supragranular layers than of the infragranular, but also an absolute decrease of the granular layer; there has been a development of pyramids from, and at the expense of, the subjacent

granules. The granules are therefore to be regarded, not only in the fascia dentata but also in the neo-cortex, as "matrix cells." To the possibilities of such a development from the granules there must be some limit, and in the postcentral cortex of the elephant a granular layer is no longer to be found; the reserve cells having all been used up, there can never be a super-elephant. SYDNEY J. COLE.

3. Clinical Psychiatry.

Two Cases of Familial Dementia Præcox [*Deux cas de Démence Précoce Familiale*]. (*L'Encephale, April, 1920.*) Laignel-Lavastine.

Cases of dementia præcox occurring in different members of the same family are by no means uncommon. The first example given is of brother and sister both admitted to the asylum during the same year. The family history is bad. The father died æt. 63; he was an alcoholic, was irritable and prone to anger, suspicious, and seclusive. He was also influenced by ideas of persecution; stated to have had syphilis. All the family on the paternal side nervous and unstable. A nephew was an idiot. Mother healthy. There were five children, of whom the first two died in infancy of meningeal trouble. The eldest of the three surviving children is normal. The other two are the patients noted. The brother was nervous and fretful as a child. The symptoms of dementia præcox appeared when he was 17½ years old, a month after a fall from a bicycle, when he was unconscious for several hours. He was suspicious, restless, destructive, and deluded, believing that people interfered with him and prevented him from working. Then for several months he was mute. He became increasingly apathetic.

The sister was apparently a normal child and was quite intelligent. Mental disorder appeared when she was æt. 12, after she had been frightened by her insane brother. There were bursts of laughter for no apparent reason. For a time she was able to continue with her work; but at 15 years of age she again experienced emotional shocks, and is stated to have suffered from chorea, which was soon cured. At about 17 she became worried because she thought people were going to do her harm; she was apathetic, capricious in regard to food, usually mute; there were grimaces and mannerisms.

In both there are now mental enfeeblement, disorientation and apathy, grimaces, and a tendency to remain in one position for prolonged periods.

The youth exhibits more mutism, inertia, and catatonia; echolalia and stereotypy. The girl is more excited, laughs, talks incoherently, is childish and timid, and speaks in the third person. They scarcely recognise one another. The condition is one of hebephreno-catatonia. Wassermann of blood and of spinal fluid negative in both patients, nor is there any noteworthy change in the number of leucocytes or in the amount of albumen in the cerebro-spinal fluid.

In the second series of cases there was paranoid dementia præcox in three sisters. The first exhibited mutism, stereotypy, explosive laughter, and emotional indifference. She had pulmonary tuberculosis. For a time she improved, then again began to laugh and grimace, was difficult

with food, and was confused. Later there were ideas of persecution by people who compelled her to laugh and grimace in order that she should be thought mad; she believed that she was magnetized and that her food was poisoned. She had to be tube-fed; she was suicidal and attempted her life in various ways.

The second patient had ideas of persecution and of grandeur, with hallucinations of hearing. At times she said she wished to marry, at others that she wished to become a nun. She also had pulmonary tuberculosis, of which she died. The third sister had ideas of persecution and was hypochondriacal.

A younger sister and a brother are nervous, and the family history is distinctly neuropathic, but no record of tuberculosis, syphilis, or alcoholism could be obtained.

In the discussion which followed, M. Leroy mentioned an instance of a brother and two sisters who exhibited the symptoms of dementia præcox. He had regarded the sisters in the first place—ten years previously—as suffering from a form of periodic mental disorder, but later the diagnosis became clear. The difficulty of accurate diagnosis is very great in certain cases; but where definite dementia præcox is noted in one member of a family, it assists in coming to a conclusion where the patient's brothers or sisters show signs of mental disorder.

HUBERT J. NORMAN.

The B— Family and the F— Family: A Contribution to the Study of Heredity in Mental Diseases [*Famille B— et Famille F—: Contribution à l'Étude de l'Hérédité des Maladies Mentales*]. (Ann. Méd.-Psychol., July–August, 1920.) Minkowska, F., and Minkowski, E.

In 1912, in the Burghölzli Asylum, Zurich, were two patients—brother and sister—who had each been admitted five times previously, and who, though they had on former occasions exhibited melancholic depression or maniacal excitement and appeared to be cases of cyclothymia, presented now a schizophrenic condition resembling dementia præcox. It occurred to Prof. Bleuler that this metamorphosis of the mental disorder might be due to a convergent heredity of cyclothymia on one side and dementia præcox on the other. Mainly to find out if this was so, the writers have investigated, under Bleuler's direction, the family history on each side as far back as the great-grandfather, and have collected information as to all his descendants—about 350 from the paternal great-grandfather and about 250 from the maternal. They have been able to give two complete genealogical trees.

The influence of convergent heredity is demonstrated, though not in the full sense of Bleuler's surmise. On the maternal side the mother and the great-grandfather were epileptics. Altogether we find on this side 9 epileptics, 7 cases of mental alienation, and 54 instances of children dying in infancy. Two modes of hereditary influence of the epilepsy are distinguishable: the graver shows itself in sterility, high infant mortality and progressive extinction of the stock, and in the occurrence of isolated cases of epilepsy among adults; the other and less grave shows itself, not in sterility nor in any excessive mortality

among infants, but in the occurrence, as the numbers of the stock increase, of more numerous cases of adult epilepsy and insanity.

On the paternal side the father, grandfather and great-grandfather were all insane, yet, among the whole 350 members, the number of cases of insanity was only 17 all told. Several of these were of a schizophrenic type; concerning the nature of others the information is vague. The predisposition transmitted in this family is not sufficient to produce a psychosis unless other noxious factors co-operate, important among which is convergent heredity. Nor is the predispositional factor such as can give rise to a psycho-pathological state of any sort indifferently; it has a quality that is specific. Although, as the psychoses tend to show themselves at earlier ages in successive generations, a progressive degeneration in Morel's sense is apparent, by the side of it there is incontestably a regenerative process; for we find on review of the generations successively descending from a single psychotic ancestor, in the second generation, 2 insane and 6 not insane; in the third generation, 7 insane and 28 not insane; in the fourth generation, 7 insane and 91 not insane; in the fifth generation, 151, none as yet insane; and in the sixth generation, 60, none as yet insane. Such figures make it questionable how far the fecundity of mentally tainted persons should by any legal measure be restricted for this would appreciably diminish the procreative forces of the nation.

SYDNEY J. COLE.

The Investigation of Forms of Mental Disorder [Die Erforschung psychischer Krankheitsformen]. (Arb. für Psychiat., München, Bd. i, December, 1919.) Kraepelin, Emil.

Kraepelin describes a system of case-cards that he has been using for over twenty-five years past. For each case he fills up a card, giving—besides the patient's name and other personal details—the most important data, in as concise a form as possible, respecting the causes of the illness, its mode of onset, its phenomena, course, and result. To the observer who has the case fresh in his memory and can quickly pick out essentials from the records, the preparation of such a card is very little trouble; and he will find that, apart from its usefulness for the future, the mere act of summarising thus briefly the main features has great immediate value. Kraepelin has long made it his practice to write up these cards himself. They are of different colour for the two sexes, and from the start of the procedure are type-written in duplicate. One set, arranged in order of admission, is bound in yearly volumes, each with an index of patients' names; the other set is kept loose, and can be sorted in any desired manner according to the particular phenomenon to be investigated. Before every such use they must be checked to see that none has gone astray; if any is lost, a fresh copy can be made from the bound one. In investigating forms of disorder the cards save much delving in voluminous records; and many a valuable observation that, however striking at the time, would, if recorded only in the case-sheets, be inevitably buried and forgotten, can, if noted on the card, maintain its rightful place in the psychiatrist's experience.

SYDNEY J. COLE.

Studies on a Case of Hypo-Pituitarism. (Amer. Journ. of Ins., October, 1920.) Newcomer, H. S., and Strecker, E. A.

The patient on admission to hospital was *æt.* 12 years 2 months; her apparent age was 17 years. Height, 63 in.; weight, 155 lb.; circumference of head, 55 cm. Her skeletal measurements showed generalized overgrowth with a relative increase in length of the long bones. The teeth showed moderate spacing; her hair was low over the forehead and in temporal region; large amount of firm fat more or less evenly distributed, with some excess in axillæ, breasts, over abdomen, and in gluteal region; breasts well developed, but not fully so for normal woman. There was some hair on labia majora, with evidence of precocious sexual development. The urinary output was from 1,000 to 2,500 c.c.; temperature was continuously subnormal. Her metabolic quotient was above the normal. An X-ray examination showed an approximately normal sella. Her mental age was 7.5 years—a retardation of 4.5 years.

Four hundred grammes of sucrose were given without producing glycosuria, and with a 40-mgrm. fall in blood-sugar; similarly, 325 grm. of glucose gave no glycosuria and a fall of 15 mgrm. in blood-sugar.

The authors consider that there was hyperfunction of the anterior lobe, resulting in skeletal overgrowth, and the posterior lobe deficiency completes the syndrome, and accounts for the high sugar tolerance, adiposity, subnormal temperature, somnolence, and dry skin.

The child was treated with pituitary whole-gland extract up to gr. 100 *t.i.d.* without glycosuria following the injection of 200 grm. of glucose. The blood-sugar became more normal and the dose of extract was decreased; several weeks later an essentially normal sugar tolerance was reached, and the authors consider it a fair conclusion to state that the patient has had the two outstanding signs of hypopituitary disease removed, *viz.*, the weight has decreased and the sugar tolerance has become normal. The mental condition has markedly improved.

It is interesting to note that administration of thyroid extract in small doses caused symptoms of thyroidism and the drug had to be discontinued.

L. H. WOOTTON.

Trauma and other Non-Luetic Influences in Paresis. (Journ. of Nerv. and Ment. Dis., August, 1920.) Osnato, N.

Case-histories are given which tend to show that head injuries (9 cases), emotion (1 case), doubtful traumatic factor plus infection of the bladder and bed-sores (1 case), influenza with pneumonia (1 case), and prolonged etherisation (1 case) may acutely precipitate paresis in an individual already suffering from cerebral or general syphilis, or adversely affect an existing paresis. Tanzi and Lugaro believe that an endogenous or exogenous element intervenes in the cases of cerebral syphilis to produce an alteration in the permeability of the blood-vessels, allowing a continuous passage of spirochætes and their toxins into the ectodermal tissues and thus transforming syphilitics into paretics, and that the difference between the syphilitic cerebral processes and those of paresis are explained by the difference in the site of the infecting organisms. They do not agree with the theory of various French authors

that there is a specific nervous strain of spirochætes for paresis. They feel with Kraepelin that alcohol and other toxic and infectious agents do have a contributing predisposing influence in the production of paresis, and they think it possible that trauma favours a decadence of the nervous system in syphilitics. Orton found two types of lesions in the blood-vessels. One was stationary and the other showed a chronic progressive inflammation. The stationary lesions were those of healed syphilitic endarteritis with thickening of connective tissue between the intact endothelium and the elastica. He believes that these lesions are due to the varying degrees of syphilitic arteritis during the early stages of the infection, and are not characteristic of the paretic process in the vessels. This latter process consists in an active inflammatory change characterised by a lymphocytic and plasma-cell exudate in the adventitia. These processes were found also in many extra-cerebral vessels. Orton considers that these findings are sufficient to prove the hypothesis of the invasion of the brain by way of the peri-arterial lymph-spaces. The writer concludes from the pathological findings noted above and those of Adolph Meyer, Frazier and others, along with his own clinical observations, that any injury to the small blood-vessels which will allow the spirochæte to enter the brain-tissue will immediately favour the institution of the paretic process. This injury may be an actual trauma with hæmorrhage, or it may be an infective or toxic process which injures the intact endothelium and favours the entrance of the spirochæte into the adventitia and the perivascular lymph-spaces and thus into the brain tissue. Trauma of the brain may, by causing vascular injury or brain destruction, be followed later by gliosis and nerve-cell sclerosis, allowing first the spirochætal invasion and later adding to the gliosis and sclerosis of nerve-cells which are also an integral part of the paretic brain pathology. The writer thinks it possible that an excess of the adrenal content of the blood and a hypersecretion of the thyroid gland caused by emotion may produce an increased permeability of the blood-vessels or an actual damage to their structure, and so favour the passage of the spirochæte. Account should also be taken of the changes caused in the nerve-cells by fatigue and emotion (Crile).

C. W. FORSYTH.

Encephalitis Lethargica. (State Hosp. Quart., November, 1920.)
Montgomery, W. H., and Waldo, L. T.

The apparent chronological relationship to influenza led to the conclusion that encephalitis lethargica was probably a sequel to influenza. Wittich and Sennert noted a comatose variety of influenza as early as 1580. In 1712 there appeared in Tübingen the first outbreak of sleeping-sickness definitely associated with influenza historically. Following the epidemic of 1889-90 in Northern Italy a condition called "nona" appeared, accompanied by fever, delirium, and coma. This did not extend to other European countries or America, in contradistinction to the wide spread distribution of the influenza epidemic it followed. The present epidemic of encephalitis lethargica had its beginning near Vienna in the winter of 1916. Early in 1918 it was recognised in Western Europe, and about a year later had arrived in America. This history shows why encephalitis lethargica was at first

considered probably a sequel to influenza. On the contrary, Flexner pointed out in 1916 that, when the first cases of encephalitis were recognised in Austria, the influenza epidemic had not made its appearance, also that the location of the epidemic of nona coincides approximately with that of the first cases of the present epidemic, and suggests that encephalitis may be endemic in that section of south-eastern Europe contiguous to the boundaries of Austria, Italy and Switzerland, awaiting only favouring conditions to become epidemic. Such conditions were produced by the war. The pandemic of influenza prepared the soil by lowering resistance. Influenza is thus a separate infection and predisposing only in its relation to encephalitis lethargica.

The pathological changes are found mostly in the basal ganglia, midbrain, and bulb, but cerebrum and cerebellum may show changes. Congestion, œdema, and round-celled infiltration of pia-arachnoid are found. Those cases with delirium are most likely to show cortical changes. There are also deep perivascular infiltrations with small hæmorrhages; these account for the focal signs.

The ætiology is still undetermined. Attempts have been made to infect animals by inoculating with the affected nerve-tissues and with a minute filtrable organism from the naso-pharynx. Some are stated to have been successful (Strauss, Loewe, Hirschfeld); others have been failures. Some writers have attempted to identify it with poliomyelitis ætiologically. The disease is infectious and mildly communicable, most probably through the mucous discharges of nose, mouth, and throat. At first in America cases were missed and diagnosed as tubercular meningitis, Bell's palsy, or other disease.

The disease varies in intensity. Some cases are very mild and clear up in a few days. It has the appearance of a general infection. Nausea, headache, high temperature (102° or 103° F.), unaltered temperature, raw tongue, oral inflammation, diarrhoea, constipation, retention of urine are mentioned as symptoms. Rapid loss of flesh and weakness and prostration follow. Pain in the arms and legs often occurs early. There is a general hypersensitiveness of the whole body, and patients may cry out with pain when moved. Pain at the back of the neck increased by pressure is common. Kernig's sign is generally absent, as is Babinski's. Deep reflexes are likely to be hyperactive.

The somnolence appears early, and usually is not deep enough to prevent the patient being roused. Patients may "come to" and easily reach a high level of consciousness. Mild cases get up, walk about, and try to shake off the lethargy, while some cases lapse into a stupor from which they cannot be roused. The stupor may closely resemble a deep sleep. There are present quite constantly jerky movements involving the arms and legs. Focal signs are constant in greater or less degree. The most striking feature may be oculomotor palsy. Strabismus is generally internal. Bilateral incomplete ptosis, facial palsy (which may be bilateral, giving a mask-like countenance), unequal pupils, oscillation of pupils and nystagmus may be present. There are also paræsthesias, hyperæsthesias, neuralgias, and other sensory disturbances. Involvement of the vagus may cause heart and respiratory disturbances, and these are of grave import.

Mental symptoms.—Delirious features predominate. There is a

lowering of mental tension. Either a quiet or restless talkative somnolence is usual. The mental content has rather a superficial character, one patient showing an occupation delirium, another a fear reaction.

Prognosis is always grave, if mild abortive cases be excepted. Of three cases reported only one recovered. The duration may extend over weeks or months.

Treatment is symptomatic, having in mind the disease is a general infection. Nourishment must be given freely. This and careful nursing are important. Encourage elimination. Sodium bicarbonate with plenty of water is advised. Urotropin is recommended, but is contra-indicated by albuminuria and any kind of kidney irritation. For the relief of restlessness and delirium, veronal in small doses proved surprisingly efficient.

W. J. A. ERSKINE.

Mental Forms of Epidemic Encephalitis [*Formes mentales de l'encephalite épidémique*]. (*L'Encéphale*, August, 1920.) Bremer, M.

The author narrates 4 cases presenting syndromes of acute delirium (2 cases), confusion (1 case), and mania in a child, æt. 9.

(i) In the first case, a man, æt. 34, the clinical signs were the following: hallucinatory delirium with extreme motor and verbal agitation, insomnia, and fever. The bacillary antecedents of the patient, his rapid wasting, the marked lymphocytosis of the cerebrospinal fluid made one think, in spite of the absence of clear meningeal symptoms, of a prolonged bacillæmia, while it appeared on questioning the family that he had been sharply attacked by a diplopia, of which no traces remained. The fever and delirium diminished very slowly. Coldness of the legs persisted. A month and a half later myoclonic twitchings of great amplitude developed, affecting the abdomen and the right leg, and at the same time an extreme hyperæsthesia, superficial and deep, of the outside of the left leg and the dorsal aspect of the foot. These persisted. There still exist an accommodative asthenopia and a slow optic neuritis. On the contrary there is no psychical sequel.

(ii) A woman, æt. 47, attacked suddenly by terrifying hallucinations, of the absurdity of which it was possible to convince her and of which she preserves a curiously precise memory. She showed delirium, fever, acetonæmia, diplopia, and myoclonic twitchings. She became normal in mind, but had a myoclonic condition three months after the malady.

(iii) A man, æt. 26, in a state of stupor. There was a past history of insomnia in 1912, shell-shock in 1915, and confusion after an air raid in 1916. After several weeks he complained of insomnia and diplopia. On March 14th he got lost in Paris, was taken home by the police and did not recognise his mother; aspect dull, head hung; when questioned answers only after a long interval; gives his age and knows where he is, but nothing more can be got out of him. There exist diplopia and myoclonic twitchings in the neck and left half of the body. Two months later there was only a certain slowness in response and a want of equilibrium in the external and internal ocular muscles.

(iv) A boy, æt. 9, entered hospital in February last presenting then

an oculo-lethargic type. He had afterwards a phase of somnolence with slight hemichorea which lasted about two months, then a phase of diurnal somnolence and nocturnal insomnia for a month, then finally a phase of constant insomnia and excitation with mania, especially at night, which still exists. He had to go to an asylum. The mania was generally in the first part of the night, sometimes after a short sleep produced by large doses of hypnotics. He presented the ordinary symptoms of acute mania and never was still, was threatening, gesticulating; and performing monkey-tricks all the time. There were no confusion and no hallucinations. At another time he was furiously maniacal, threw himself against the wall, broke a window and tried to strangle himself, shouting "Death! Death!" and cursing those who essayed to master him. He seemed then to have very transient hallucinations at rare intervals, and these did not worry him, but made him angry. All these accesses of his trouble were present for about three hours at a time, and were followed by a calm sleep lasting until morning. At the present time the boy, in spite of an excellent appetite, is very emaciated. He behaves as a hypomaniac, is inattentive, disturbing, jeering, accusing, but wheedling and affectionate. For the rest he is very intelligent, capable of reasoning, and without antecedent pathology. The ocular symptoms have disappeared some time. A slight choreic instability of the left arm persists.

What is the significance of these psychical forms of epidemic encephalitis? The toxic pathogeny of acute delirium and mental confusion is classic. The symptoms of toxæmia were evident in the patients. They were such in the second case that the diagnosis of typhoid suggested itself. In the three first cases no psychical sequelæ were ascertained. It does not, then, seem necessary to invoke for them a special cortical localisation of the infectious processes. It is necessary to note, however, that none of the patients presented any Parkinsonian symptoms. In the child the toxic phenomena were not evident.

We are still ignorant whether it is a state of infection. But what we know of the persistence, sometimes very prolonged, of the virus of encephalitis and of sudden awakenings of the "fire which smoulders" (Netter) invites us to keep in mind that possibility, although everything seems to indicate that the infectious processes are extinguished.

W. J. A. ERSKINE.

Mental Disturbances in Lethargic Encephalitis. (Journ. of Nerv. and Ment. Dis., September, 1920.) Abrahamson, I.

The toxins of lethargic encephalitis attack all cells, but nerve-cells are the most vulnerable. Irritability both to internal and external stimuli diminishes. Thought is a function which must suffer in this disease, and lethargic encephalitis invariably gives rise to mental disturbances. Somnolence and insomnia, mania and depression, delirium and coma, confusion and catatonia may all be observed, but these are essentially variations in the severity and phase of its disturbance, not in its nature. At the onset of the disease there is a variable period in which the patient finds increasing difficulty in attending to his work. Next a time of yawning ensues, and then the eyes close. As a rule the patient lies on his back with closed eyes as if in deep sleep. His

pulse, temperature, and respiration may all be of normal character. Although he may display neither conscious nor unconscious activity, yet he may respond immediately when questioned, and his short answers show no loss of memory or orientation. Having answered he resumes his seeming sleep, his attitude expressing a desire to be left alone. This somnolence may last for days or weeks, and then usually gradually disappears, leaving a state of self-commiseration, weariness, and sleeplessness which wears off slowly. The somnolence may deepen into a stupor, from which the patient is not easily roused to conscious response. In the night a restless delirium often appears, spontaneous movements and sounds being made. In the quiescent intervals the patient lies like a log, his face mask-like. This state may pass into one of catalepsy and catatonia. This condition may pass away, leaving confusion, faulty orientation, and memory-loss of the Korsakoff type, with poverty of thought, and lack of initiative. The stupor occasionally deepens into coma, which, as a rule, ends fatally. The coma may also appear somewhat suddenly, and be due not so much to the specific poison of the disease as to acidosis. McNalty attempts to explain these mental disturbances by the blocking of visual stimuli through closure of the eyes by ptosis. The blind tabetic is, however, not somnolent. The depth of the somnolence and also its duration are unrelated to the severity of the lesions, and while the lesions persist, the somnolence, as a rule, passes. The mental disturbance is typical of an intoxication, and is due to the specific action upon the cerebral nerve-cells of the toxin or toxins of the protozoa of lethargic encephalitis. The organ of expression of psychic processes is the musculature, but in this disease no perceptible muscular change may occur. The full bladder and crumpled bed may be ignored, although sensory stimuli stream into the brain. In the earlier stages, judging by the responses, the associative processes, though slowed and restricted, are still orderly. Later the commanded movement tends to repeat itself (to perseverate), and the required attitude to persist (catatonia). This morbid "set" is mainly due to a lack of associative capacity. This lack would take place if the toxins raised the resistance at the synapses to a height which prevented all ordered flow of association. This synaptic interruption probably occurs, for at this stage arise the hallucinations and delusions which are associated with the stupor. It may be that the synapse suffers earliest and most in the attack. Any poison, however, which reduces the vitality of the cell heightens the resistance at the synapse. The persistent sequence of severe intoxication, the psychoses, the Korsakoff phenomena, and even the protracted recovery, show that in addition to nutritive changes actual structural disturbances may also occur—a true inflammation with destruction of the processes of the brain cells.

C. W. FORSYTH.

The Cerebro-spinal Fluid in Epidemic Encephalitis. (Journ. of Nerv and Ment. Dis., October, 1920.) Boveri, P.

In this study 16 cerebro-spinal fluids were examined at different periods of the disease, from the fifth to the thirty-fifth day. Thirteen belonged to cases of the classical type of lethargic encephalitis; 2 were

of the myoclonic type, and 1 was a mixed form. Seven cases ended fatally.

Pressure of the fluid was found slightly increased in 8 cases, in the remainder it was normal. The *colour* was always clear. *Albuminoids* were found by Boveri's reaction in 7 cases but to a slight extent. The *reducing power* was lessened in 1 case (myoclonic type), increased in 11, and normal in 4. Two to 14 lymphocytes per c.mm. were found. Leucocytosis were present in 12 cases, with very low figures—4 to 6 *per cent*.

The author summarises his conclusions as follows: "(1) The cerebro-spinal fluid in encephalitis patients is not to be considered normal. (2) The alterations of the liquid are always slight either in connection with the cytological examination or in connection with the presence of albuminoids, and with reducing power. (3) In all phases of the disease the liquid always shows the same slighness of alterations; in its initial phase, however, it shows its anomalies more easily. (4) The different clinical types of epidemic encephalitis (lethargic form, myoclonic form, mental form) show no particularly characteristic cerebro-spinal fluid. (5) The slighness of the alterations and their uniformity in all phases of the disease are facts of great importance, especially in view of the diagnosis of epidemic encephalitis, so that it may be possible to differentiate this disease from the different forms of meningitis, particularly from tuberculous meningitis and syphilitic meningitis."

C. W. FORSYTH.

Mental Forms of Epidemic Encephalitis [*Les formes mentales d'encéphalite épidémique*]. (*L'Encéphale*, November, 1920.) Briand, M., and Rouquier, A.

The authors distinguish:

(1) The primitive mental form (confusional, delirious, or hallucinatory), often rapidly fatal. This form resembles the acute delirium of older authors.

(2) Psychopathic sequelæ (hypomania, depression, hebephrenia-catatonia, of variable evolution and prognosis), secondary to encephalitis.

(3) Motor manifestations, having many and various forms, either organic or mental, and upon which suggestion may graft hysterical symptoms.

These clinical forms appear to arise from different localisations, and very probably from variations in the pathogenic agent on the one hand and in the resistance of the soil on the other. W. J. A. ERSKINE.

Brain Tumours as seen in Hospitals for the Insane. (*Arch. Neur. and Psychiat.*, April, 1920.) Morse, Mary E.

Chiefly to inquire why in asylum cases brain tumour is so often undiagnosed, the writer has reviewed all the cases of brain tumour that came to necropsy in the last ten years in five State hospitals for the insane. Excluding gummata, they numbered forty-six, or about 1·7 *per cent*. of all necropsies (about the same percentage as for general hospitals). Frontal tumours predominated (33 *per cent*.). In only about 25 *per cent*. of the cases was tumour diagnosed during life, even tentatively. Most of the patients were admitted in the late stages of the disease. About

30 *per cent.* appear to have been defective or psychotic before the tumour developed. The average age was fifty, which is considerably higher than that for brain tumours in general; 68 *per cent.* of the cases occurred between the ages of forty and sixty, whereas in general practice over 50 *per cent.* occur between twenty and forty, and there are many under twenty. Reasons why in asylums so few tumours are diagnosed are that more attention is paid to the psychiatric than to the neurological aspects of the cases, that ophthalmoscopic examination is not made as a routine measure in organic cases, and that, as most of the patients are middle-aged or elderly, there are frequently complicating factors, mental and physical, that in younger persons would be absent. In elderly people brain tumours may reach a large size without giving characteristic signs; the senile brain atrophy counter-balances the tendency to increase of intracranial pressure, and at this age the tumour is commonly of slow growth. In brain tumour in asylum patients of middle age the usual predominating symptoms are simple deterioration and apathy, especially in frontal tumour, but also in tumours of other regions. In a predisposed person a brain tumour may set up an independent psychosis. Attempts have been made by some authors to correlate particular mental symptoms with tumours of different regions, but the very thing that is most striking about this series of cases is the fact that they do not present clear-cut psychiatric pictures.

SYDNEY J. COLE.

4. Pathology.

Anatomo-pathological Study of Nervous Centres in a Case of Congenital Myxædema with Cretinism [Étude Anatomo-pathologique des Centres Nerveux dans un cas de Myxædéma Congénital avec Crétinisme]. (*L'Encéphale*, November, 1920.) Marie, P., Tretiakoff, C., and Stumfer, E.

There is a discordance between the intensity of the psychical troubles due to hypothyroidism and the apparent integrity of the encephalon which impedes our knowledge of the mode of action of humeral troubles on the psychical centres. The examination of the encephalon of a patient suffering from congenital myxædema with cretinism (a woman who died æt. 36) revealed the existence of diffused and marked lesions, consisting in an intense infiltration of the vascular coats by iron compounds. These can explain, partly at least, the psychical troubles, and they also establish a relation with thyroid insufficiency.

The lesions affected the vessels of all the white matter of the cerebellum, the olives, and those of the lenticular nucleus on both sides. They consist in a great infiltration of the coats of the vessels of great and medium calibre, but especially of the capillaries, by an amorphous, sometimes granular substance coloured violet-black by hæmatin. Ferro-cyanide of potash with hydrochloric acid gives an intense blue colour, showing the existence of iron compounds. Very little calcium was present. Polychrome blue showed the deposits coloured an intense black and was the best method.

The authors conclude that the deposit is due to hypothyroidism, and as the woman was so young, the deposit mostly of iron and not calcium compounds, and the site unusual, it was not a precocious arteriosclerosis. Oxidation, one knows, is poor in myxœdema, and iron plays an important part in oxidation. The precipitation of iron compounds would fit in here. Here one could equally well recall the general chromatolysis in the nervous system noted by Mott and Brun in three cases of hypothyroidism, and the part iron plays in the constitution of the Nissl granules according to Scott. Marinesco also states that considerable quantities of iron occur in nerve-cells. The authors also think that the cerebellar symptoms described in cases of myxœdema by Odien are explained by their present discovery. The psychical troubles of myxœdema are explained by the retardation of the phenomena of nutrition of the nerve-elements, also perhaps by the affected vessels causing bad nourishment of the tissues. The great mental variations between one patient and another could in a certain measure be explained by the intensity of the vascular lesions and their locality. Two good plates of microscopical appearances are given.

W. J. A. ERSKINE.

The Changes in the Central Nervous System in Spotted Fever, and their Significance for the Histopathology of the Brain Cortex [*Die zentralen Veränderungen beim Fleckfieber und ihre Bedeutung für die Histopathologie der Hirnrinde*]. (Arb. für Psychiat. München, Bd. i, 1919.) Spielmeyer, W.

In 1913 Fränkel announced that the anatomical basis of the skin spots in this disease is a necrosis of circumscribed and mostly sector-shaped portions of the intima of the smallest arteries, and that, at the place where the vessel is thus affected, there is a perivascular infiltration in the form of a clump of cells, mostly descendants of adventitial and periadventitial connective-tissue cells. In 1914 he described similar punctate lesions in internal organs, especially the brain, myocardium, liver, and gastro-intestinal tract. Spielmeyer has investigated the changes in the brain and spinal cord in twelve cases, and in this paper (54 pages, 10 plates) he gives a description of the microscopical appearances. The lesions fall mainly into three groups—foci, infiltrations around vessels in the substance of the brain and cord, and cell-deposits in the finer membranes.

(1) *Foci*.—These are the lesions whose resemblance to the skin spots attracted Fränkel's notice. They are spherical or oval, rather sharply demarcated from their surroundings, and mostly about 0.1 mm. in diameter, though often smaller. The places where they chiefly occur are, in order of preference, the deeper parts of the pons and medulla, the molecular layer of the cerebellar cortex, the basal ganglia, the cerebral cortex, and lastly the spinal cord; they are never found in the pia. In the brain they occur chiefly in the grey matter; there are not many in the white matter, and in the centrum ovale they are rare; they are occasionally seen in the white matter of the convolutions, but then usually impinge on the cortex. The foci in the cortex of the cerebrum lie mostly in the middle layers, and are fewer in the occipital than in other cortical regions. In a Nissl section

across a convolution one may often see, under a low power, several foci, prominent by reason of their numerous deeply-staining glia-nuclei. The focus is a proliferation of glia-cells, unaccompanied by any new formation of glia-fibres. In contrast with the skin lesions, the little vessel that runs into it never shows any necrosis and generally appears quite normal, though in old foci regressive changes in the intima can sometimes be detected. There is seldom any proliferation of vessel-wall elements and there are never any fibroblasts. In recently-formed foci leucocytes are sometimes seen, but most foci show neither leucocytes nor lymphocytes. The foci are essentially, and often purely, glial.

Along with those just described, foci of other forms are met with. In the more superficial parts of the cerebral and cerebellar cortex the foci may assume the form of rosettes, through the glia cells at the periphery of the focus being disposed radially; this peculiarity must be in some way dependent upon local conditions, yet in precisely similar situations foci of the ordinary form are not uncommon. Sometimes around a precapillary vessel glia-cells are arranged in a single or double layer upon the glial limiting membrane, so as to form a sort of rind about the adventitial space; such cells, being sometimes set radially, may give the focus a star-like appearance, somewhat resembling the rosettes, but smaller. Particularly interesting is a form of focus very common in the molecular layer of the cerebellar cortex, and termed by Spielmeyer a *Gliastrauchwerk*. In this variety the proliferated cells are not huddled together in a dense mass as in the ordinary foci, but are distributed much more loosely and over a wider area, with less well-defined limits. In Nissl sections the slender bodies of the cells composing such a focus show very plainly, because of their abundant chromophil dust; they are greatly elongated, mostly in directions perpendicular to the cortical surface, and their nuclei, likewise elongated, are sausage-shaped. The open texture of the *Strauchwerk* permits these "rod-shaped" cells (*Stäbchenzellen*), with their many delicate processes, to be easily studied, so that of their glial nature no doubt can remain, and for the same reason the vessels in these areas can be readily examined and shown to be normal.

(2) *Infiltrations around vessels in the substance of the brain and cord.*—Many of these infiltrations appear to be somehow related to the formation of the foci, for not only is it observed that in places where foci are abundant the vessels in general are conspicuous under a low power by reason of the massive infiltrations around them, but often one particular vessel—usually the stem from which the branch to the focus takes origin—has a specially pronounced infiltrate, and a like association is observed in places where foci and infiltrations are few. Yet, even where foci are few, the infiltrations are often (and this applies particularly to the cerebral cortex) pronounced and wide-spread. They are deposits, within the adventitial sheaths, of plasma-cells and lymphocytes; nowhere in the central nervous system are there any diffuse leucocytic infiltrations such as are common in the skin. On the small vessels in the brain one can see very clearly that the plasma-cells are derivatives of lymphocytes; one can observe not only the multiplication of the plasma-cells by mitosis, but their original development from lymphocytes.

(3) *Cell-deposits in the finer membranes.*—These consist, not of plasma-cells and lymphocytes, but of macrophages, developed from the lining cells of the meningeal lymph-spaces. Thus the deposits in the meninges are not analogous to those on the cortical vessels. The condition somewhat resembles the so-called "chronic meningitis" occurring in general paralysis and sleeping-sickness. (It may be noted that in some of these cases of spotted fever macrophages are found on vessels in the brain substance—not in the cortex, but in the basal ganglia and central white matter; here, as in the pia, they are derived from the resident mesoblastic cells of the locality.)

Slight diffuse degenerative changes are seen in the nervous parenchyma. The appearances of the nerve-cells resemble those in other severe infective or toxic general diseases, and are not more severe or wide-spread than might be expected from the severity of the illness as a whole. The nerve-cells are not to any appreciable extent beset with amoeboid glia cells.

The interest of Spielmeyer's observations lies not so much in their importance for the study of spotted fever as in the light they throw on the general pathology of the central nervous system, and particularly on the pathological anatomy of the brain cortex. In this disease many things are clear that cannot well be made out in such a condition as, for example, general paralysis. First, as to the genesis of the plasma-cells and the macrophages. Sometimes, even in spotted fever, as so often in other conditions, it is difficult to distinguish these two kinds of cells from one another; when agglomerated in a cramped space they come to look alike, because, of whichever kind they are, they are pressed together into the same polyhedral forms or are flattened like the cells of stratified epithelium; in the miniature lesions of this disease their totally distinct origins can be easily proved. Then, as regards the *Stäbchenzellen*. Nissl and Alzheimer originally regarded these as mesoblastic. Later (1912) Alzheimer announced that in general paralysis some of them at any rate were glial; and Achúcarro has demonstrated in cases of rabies the formation of glia-fibres on these cells; but in no condition can their glial nature be so clearly proved as in spotted fever. Further, as to the purely glial foci. It is here seen that a glia-cell proliferation can occur apart from any vascular lesion or cell exudation; *i.e.*, it need not have an inflammatory basis. Nor need it be a reaction to a decay of the nervous elements, for in spotted fever, in spite of the pronounced glia-cell proliferations, the nervous structures proper remain remarkably long preserved. Thus it is shown that a glia-cell proliferation can occur primarily and independently.

SYDNEY J. COLE.

The Structural Brain Lesions of Dementia Præcox. (*Amer. Journ. of Ins.*, October, 1920.) Gurd, Adeline E.

The writer analyses the histological findings in the brain of nineteen cases of dementia præcox. The duration of the psychosis, age of patient and cause of death are given in each case. The cases are divided roughly into three groups: (1) those dying in the acute stage of the disease, (2) those in whom the disease had lasted two to four

years, (3) the more advanced and degenerate types with a psychosis of ten to thirty-five years' standing. In the first group, the acute catatonic type, which has lasted but a few months, the marked changes are paleness of field, loss of chromatin in nerve-cells, granular degeneration of body and dendrites, very marked alterations in the nucleus with folding and irregularity of nuclear membrane, metachromatic alteration of nucleoli, severe fatty degeneration of glia and nerve-cells with many regressive and few progressive glial changes. In the second group, in addition to these alterations are noted the presence, especially in the medium-sized pyramidal cells, of a good many cells which are shrunken and sclerosed and many more undergoing severe Nissl's degeneration. In the more chronic cases of group (3) the same changes are found, besides which there was much more increase in glia elements, all regressive in nature, with severe sclerosis of the majority of the smaller pyramidal cells, and marked acidophil degeneration of the nuclei, and many fragmented and vacuolated cells. The myelin sheaths and axis cylinders also show some change, particularly the latter, which tend to split and become slender a short distance from the cell.

L. H. WOOTTON.

Histopathology and Spirochæte Findings [*Histopathologie und Spirochätenbefunde*]. (*Arb. für Psychiat., München, Bd. i, December, 1919.*) Nissl, F.

It was announced by the author in 1904, and has been confirmed by Alzheimer (who has made the subject peculiarly his own) and by other observers since, that in the paralytic brain affection there are two distinct processes going on simultaneously—the one inflammatory, the other non-inflammatory ("degenerative"). The latter is independent of the former; it occurs over and above any degeneration that is secondary to an inflammatory damage. That it is independent is established by histopathological findings, and is not deduced from any doctrine of metasyphilis.

Not because of any new histopathological observations, but simply because spirochætes have been discovered, Raecke has jumped to the conclusion that Nissl and Alzheimer's account of what happens is wrong and is now superseded. He has been saying "it is now established that a local inflammatory process underlies the whole of the changes." He talks of the diversity of the changes in the nerve-cells, and why we do not find merely the ordinary forms of acute and chronic cell change, and more particularly why the cell appearances characteristic of toxic conditions do not stand in the forefront, and he says that "on all these previously puzzling things the discovery of the spirochætes has shed a clearer light," showing us the operation of a quite novel factor—penetration of the spirochæte into the body of the cell and even into the nucleus. He says that the cell is eaten away, is irreparably damaged and speedily perishes, and that compared with such swift destruction, appearances resembling those observed in other disorders fall quite into the background.

This, says Nissl, is a pure culture of errors. In the opinion of Jahnel, now the leading authority on spirochætes in paralytic brains, invasion of nerve-cells by spirochætes is an altogether exceptional

occurrence. It is not true that the discovery of the spirochætes has shed a clearer light on the cell changes. Their diversity is no more intelligible now than before the spirochætes were found. A similar diversity can be demonstrated in non-paralytic brains. The discovery of the spirochætes does not alter Alzheimer's histopathological findings or "justify another conception of the relations between inflammation and degeneration in the paralytic process." Jahnel, whose authority Raecke so often cites, regards Alzheimer's conception as quite harmonious with his spirochæte findings. But suppose it is wrong: suppose it to be founded on inaccurate observations; only by histopathological investigation could this be proved. Or suppose it is to be shown experimentally that, in the central nervous organs of animals, spirochætes from paralytic brains produce changes exclusively inflammatory; here again it is only by the anatomist that the last decisive word can be spoken. Nissl does not himself see why spirochætes may not produce non-inflammatory changes as well as inflammatory. The mechanism of the action of the spirochætes on the brain tissue in paralysis is still entirely unknown. As regards the inflammatory changes, though we know that parasites are apt to cause inflammation, the occurrence of massive inflammatory infiltrations is no evidence that the inflammatory changes have necessarily always a parasitic origin. The anatomical characters that distinguish the paralytic affection from ordinary syphilitic inflammation remain, even if the metasymphilitic hypothesis is rejected.

SYDNEY J. COLE.

The Sachs-Georgi Precipitation Test in Syphilis, with Special Reference to its Employment on the Spinal Fluid [*Die Sachs-Georgische Ausflockungsreaktion bei Syphilis, mit besonderer Berücksichtigung ihrer Anwendung am Liquor*]. (Arb. für Psychiat., München, Bd. i, December, 1919.) Plaut, F.

This test, though not without difficulties of its own, is far simpler than the Wassermann, and, giving mostly concordant results, may prove a useful substitute for it. One c.c. of the patient's blood-serum, inactivated by heating at 56° C. for half an hour, is diluted with 0.85 per cent. saline to 10 c.c., and is then mixed with 0.5 c.c. of cholesterinised alcoholic heart-extract diluted with saline to 3 c.c.; after two hours in the incubator and ten to twelve hours at room temperature the result is read in the agglutinoscope. In spinal-fluid tests series of increasing doses are used. The paper contains a long discussion of technique and precautions.

Prof. Plaut has made parallel tests (Wassermann and Sachs-Georgi) of 500 sera. Some interesting discrepancies were observed. Of the 500 sera, 222 were from cases of known or suspected syphilis. In 116 of these both tests were positive; in 67, including 31 known to have been syphilitic, both were negative. Cases in which one or other reaction was doubtful being excluded, there remained 16 with a flat disagreement—10 with only the Wassermann positive, 6 with only the Sachs-Georgi. The 10 that gave Wassermann only were all of them cases of long-standing syphilis, and included 3 juvenile paralytics and 3 other congenital syphilitics; on the other hand, among the 6 giving Sachs-Georgi only, there were 3 cases of secondary syphilis and 1 of

primary. Plaut's material does not suffice to show whether after syphilitic infection the Sachs-Georgi reaction appears earlier than the Wassermann, but it shows that in cases of recent syphilis undergoing treatment the Sachs-Georgi may often remain after the Wassermann has disappeared. The series included 49 paralytics, and in only 3 of them was the Sachs-Georgi negative—the juveniles already mentioned; in 3 other juvenile paralytics it was positive.

The 278 remaining of the 500 were cases in which there was no suspicion of syphilis. In 267 of these both tests were negative; 5 gave a positive Sachs-Georgi and 6 a doubtful; none a positive Wassermann. The 11 were of so miscellaneous a character as not to throw serious doubt on the specificity of the test; such findings may perhaps become fewer when the technique is perfected, but it is well known that the Wassermann also not rarely gives similar unexpectedly positive results in cases with no history or clinical evidence of syphilis.

Plaut has also made parallel tests of 158 spinal fluids. In 62 of these, including 60 paralytics, both tests were positive; in 73, including 30 known syphilitics, both were negative. There were 15 in which minor divergences were observed, or in which one or other reaction was doubtful. In 8 cases there was a flat disagreement, and in all of these (who were all of them paralytics) it was the Sachs-Georgi that was negative. The total number of paralytics was 80, of whom 76 gave a strongly positive Wassermann. They included 8 juvenile paralytics; all of these gave a strongly positive Wassermann, but 5 gave only a weak Sachs-Georgi and 3 a negative. It is interesting to compare these last results with the above-mentioned observations on juvenile paralytic sera.

It is known that in non-syphilitic meningitis in a person whose blood gives a positive Wassermann, the spinal fluid may give a positive Wassermann. Plaut finds that it may similarly give a positive Sachs-Georgi, as he has observed in a meningococcus meningitis in a congenitally syphilitic child. Apart from such complication with acute meningitis, a positive Sachs-Georgi reaction in the spinal fluid is evidence of the syphilitic nature of an organic nervous affection.

SYDNEY J. COLE.

- (1) *The Density of the Cerebro-spinal Fluid in Cases of Mental Disease;*
 - (2) *Indigo-forming Substances in Urine (Urinary "Indican");*
 - (3) *Indigo-producing Substances in Urine (Urinary "Indican").*
- II. New Qualitative Tests. (Reports from the Chemical Laboratory, Cardiff City Mental Hospital, Nos. 1, 4 and 5, 1920.)*
Stanford, R. V.

(1) The density of the cerebro-spinal fluid was determined by the pyknometer, as the quantity of fluid to be examined was too small for the specific gravity to be measured with an hydrometer. The results are expressed as densities at 25° C. relative to water at 4° and are tabulated under four headings: (1) General paralysis; (2) epilepsy, (3) various types of mental disorder excepting 1 and 2, and (4) secondary and senile dementia. The conclusions arrived at from these examinations are that the density of the cerebro-spinal fluid in general paralysis is higher than in other mental diseases except epilepsy; it is

also high in acute confusional insanity. A repeated high density will confirm a diagnosis of general paralysis. The author suggests that the course of all mental disease is accompanied by metabolic disturbances of the brain tissue, leading finally to a loss of brain substance in general paralysis and terminal dementias, whereas in acute and recoverable mental disease the increased katabolism is temporary or periodic, and is compensated by an increased supply of nutriment to the brain, no changes being detected in this organ *post mortem*.

(2) The indigo-forming substances in the urine are very unstable, and their decomposition cannot be attributed to the influence of a moderate acid or alkaline reaction, light, temperature, bacteria, or atmospheric oxidation. Possibly decomposition is connected with an auto-oxidation. The indigo-forming substances have not yet been isolated from the urine. The Hoppe-Seyler and precipitation methods were tried without success, but by salting out from the urine and simultaneously extracting with ether and alcohol, products of a very unstable constitution were obtained which gave the indigo reaction, but which could not be solidified. It is unlikely that these products consist of potassium indoxylsulphate as generally held, as this substance is only unstable in acid solution, and resists decomposition after many hours' heating at 160° – 170° C. in caustic potash, and is completely decomposed in neutral solution only after heating at 120° – 130° C., whereas "indican" of human urine disappears at room temperature in acid, neutral or alkaline solution. It is more probable that indigo-producing substances of the urine are not always the same, but are a mixture of nearly related compounds of the indigo group. This would explain their varying behaviour in different urines.

(3) The usual tests for indican in the urine (treatment with an acid, an oxidiser and extraction with chloroform) are unsatisfactory. They do not give concordant results in duplicated experiments, and the indigo solutions are all colours between red and blue, decolorising spontaneously in many cases. Decolorisation may be due to oxidising impurities in the chloroform used for the extraction of the indican, or to "over-oxidation" due to secondary reactions from the presence of air.

The author has devised an improved indigo test termed the "carbon dioxide process," in which the urine is treated with hydrochloric acid, chloroform and hydrogen peroxide, the whole process being carried out in the absence of air by means of a stream of carbon dioxide gas. By this method pure blue solutions and concordant results in duplicate analysis are always obtained. The isatin test can also be improved by the exclusion of air.

F. E. STOKES.

5. Sociology.

Applicability of the Findings of the Neuro-psychiatric Examinations in the Army to Civil Problems. (Ment. Hyg., April, 1920.)
Bailey, P.

The American Army mobilisation has furnished the first national health survey. The completed results of the Neuro-psychiatric Service are presented. Facts of pathological significance were obtained by

the rejection of recruits, and the discharge of the recently enlisted who were reported unfit for service. The total of unfitness approximated 16 *per cent.*—a static fact not a product of war. The neuro-psychiatric group of diseases was fourth in order of frequency, only exceeded by (a) eye, ear, nose and throat; (b) bones and joints; (c) heart and blood-vessels. Up to May 1st, 1919, 72,000 such cases were returned to the civil community. These figures concern a limited male age-group; extended to total population they reveal a serious problem in public health and preventive medicine. Unwounded patients treated by the mental service to the same date numbered 69,394, the percentages being: Psychoses, 11; epilepsy, 9; organic nervous disease, 10; glandular diseases affecting growth, 7; neuroses, 17; inebriety (alcohol or drug), 6; mental defect, 31; psychopathies, 9. Physical restraint proved all but unnecessary. In military hospitals grave cases rapidly recovered; the former custom of prison treatment did not so result. The first group is a medical problem; the last four are also sociological. Individuals of these four classes are everywhere—unrecognised, the despair of guardians, employers, and all connected with public policies. Ineffective themselves, they render others the same; they are the soil for sedition and for rapid hysterical mass movements. Reconstruction is for them impossible till their problem is studied and understood by the general community, and remedies are supported by legislation.

Neuroses.—Functional nervous disorders are startlingly wide-spread, embracing one-sixth of the total rejections (more than insanity and inebriety together). Disagreeable personal situations are subconsciously avoided, not through malingering, but because the individual is incapable of self-help. The widely diverse symptomatology deceives alike relatives, associates, and even medical men. Whether rich or poor they haunt clinics with vague complaints, always idle or ailing; many were missed and classed as “gastro-intestinal disorders,” and they probably form 10 *per cent.* of all patients in ordinary civil medical wards. They lack virile characteristics, cannot support physical strain, swell the inert mass readily inflamed by new doctrines, and in the army were tinged with unwillingness to serve. Two subdivisions are found: those who exhibit abnormally prolonged recovery after physical traumata; and those who lose heart in trying or uncongenial positions. Of the home cases 71 *per cent.* were out of the service in three months, and of a military group 61 *per cent.* spent two-thirds of their time in hospital. This class results in more ineffectiveness and unproductiveness than insanity. Remedies mean the classification and treatment of large numbers by methods of raising *morale* and idealism—in civil life hitherto chiefly by boys’ clubs, scout organisations, “settlements,” playgrounds, etc. Ideals are thus stabilised at the habit-forming periods. The greatest foe of the neuroses is found in working for others, in the replacement of personal preoccupation by co-operation and patriotism. Universal military service would be a helpful factor.

Mental defect.—Among neuro-psychiatric rejections these totalled 29 *per cent.* in whites, 48 *per cent.* in blacks, and in drafted men 6 *per cent.* Many were foreign-born—in New York State 31 *per cent.* of the rejected. In spite of examination more feeble-minded were passed than of any other class. Ordinarily one-third of this class can be trained

to 50 *per cent.* normal efficiency. In institutions 73 *per cent.* are useful, but training must be highly specialised and long. Defectives are useless for military service, and should not be accepted. Left alone they are costly and dangerous; segregated on farms they are especially efficient as agricultural labourers, even the low-grade boy having a promising future. In all the groups individuals are psychopathic in readily yielding to the exactions of existence. There is a separate group which cannot be classified by examination as pathologic. They are superficially brilliant and enthusiastic, but unbalanced and eventually disloyal to any organisation; suggestible, susceptible to propaganda or disruptive acts, or with abnormal personality traits, suspicion, self-consciousness, obsessions. They cannot get out of undesirable situations nor profit by experience; they are "recidivists," criminal or otherwise; individualistic and unfit for team-work. Delinquency is but a further step. In civil penal establishments defectives, exclusive of psychopaths, exceed one-third. The New York Commission of Prisons (1918) found feeble-minded in State prisons, 25 *per cent.*; reformatories, 26.5 *per cent.*; penitentiaries and workhouses, 33.5 *per cent.* Psychiatry and criminology are closely linked. Previous army experience anticipated 50,000 delinquents among three million men. Actually 14,000 occurred. The discrepancy appears due to (1) the wider representation in new armies, therefore higher grades than in old regular forces; (2) prohibition in camps; (3) the exclusion of potential delinquents by neuropsychiatric rejection. The great lesson is that our communities contain "fixed quotas of crippling and multiplying diseases" as yet uncontrolled; these individuals are handicapped towards society and injure it. Sound laws, secured, should be enforced as regards foreign-born mental undesirables, excluding citizenship; community agencies must deal with neurotics; drug manufacture and addiction should be properly supervised. There is required standardisation of all State care with extended control of defectives (parole, colony and institution care); generalised psychiatric clinics at courts, in correctional and penal institutions; the denial of full liberty to the deficient. Childhood and adolescence is the time for training subnormals, as well-formed habits are more valuable than intelligence. Psychopathies and criminal traits are often the outcome of environment (criminal, drunken or divided homes); even normals thus become deviates. Special classes benefit 90 *per cent.* of subnormals classified on intelligence and personality traits. In New York State alone 41,000 feeble-minded are outside institutions. The needs are abundantly proved, and a great field lies open.

JOHN GIFFORD.

A Study of Delinquent and Dependent Girls. (Journ. Delinq., March, 1918.) Ordahl, L. E., and Ordahl, G.

The inmates of the Geneva State Training School for Girls, Ill., were studied to acquire data for more scientific classification, treatment and parole. The article is of thirty-one pages with numerous instructive graphs. The institution encourages wholesome athletic, academic, industrial, and social achievement—healthy rivalry being an important adjunct. The series, representative and unselected, covered the total population of 432 girls. The psychological tests employed were: (a)

The Faribault revision of the Binet-Simon scale; (*b*) for all cases over 12 years, Terman's Stanford revision (1916). Self-histories proved reliable in all but 2 *per cent.*; long residence induces modification by adding the lurid experiences of others. *Median chronological age*: on admission, 14 years; on examination, 15·6. Committal in 13 *per cent.* was before puberty; only 5·5 *per cent.* remain after 18. Discharge or parole is in adolescence; average stay 1·6 years, but varies greatly. *Actual age*: under 6 years, 3; the rest, 7·5 to 22, the majority being 12 to 19. *Mental age*: Formal education tests, with eighth school grade considered normal attainment, show average retardation of three years; but on chronological age comparison with school statistics increases this to five years. Their utmost endeavour only reduces this period to four years. *Causes of retardation*: (1) Lack of parental control and encouragement—involved in most cases; (2) insufficient ability to perform school tasks—far the commonest; (3) inelasticity of ordinary curriculum, neglecting individual needs. Only 22 (5 *per cent.*) of the whole group could reach the eighth grade after three or four failures. They are equivalent to the lowest quarter of public school population, which is backward and unable to progress in one or more subjects and seeks to leave. The bugbear should be omitted. Specific training is essential to establish wholesome ideals of behaviour within their mental vision—a social problem requiring specially trained teachers with access to the scholar's home-life. A psychological department would fill the gap; the feeble-minded would be recognised and relegated to detention; the border-lines could be suitably dealt with, and the dull-normals would be fitted for ordinary life situations and prevented from immorality. *Intelligence quotients* (I. Q.) obtained by psychological scales are more reliable and show *per cent.*: Feeble-minded, 22·9; doubtful, 19·9; border-line, 24·7; dull-normal, 27·3; average normal, 5; and superior normal, none. Terman classes the doubtful as border-line; the authors regard them as definitely feeble-minded, making these = 42·8 *per cent.* Omitting the dependents, the delinquents give 35·2 *per cent.* On this basis 95·2 *per cent.* of the group equal the lowest fifth of public school children. *Diseases*: Tuberculous number 35; venereals, 99 (22·9 *per cent.*); epileptic or equivalent, 4; the mentality not influenced in more than 15 *per cent.* *Hysteria* is detrimental to social behaviour and mental reactions; it almost determines immorality. Of 36, 23 were known immoral, and the committal of the rest was to avoid it. The instinctive aversions to familiarity are lacking. Their physical health was good. The group characteristics were untruthfulness, instability, vicious tendencies to self-mutilation or suicide, violent passions, emotionalism, foolishness and stupidity. Mentally they group as the mass. *Causes of commitment*: The stated causes were immorality, 64 *per cent.* (but 83 *per cent.* were known immoral, and 40 *per cent.* had V.D.); incorrigibility, 18 *per cent.* (unmanageable, 10·9; truancy from home, 5; from school, 2·3); dependent, 11 *per cent.* (with cases committed for other causes = actually 25 *per cent.*); unfit homes, 3 *per cent.*; and individual cases—stealing 6, murder 1, suicide 1, forgery 3, male impersonation 1. Runaways were feeble-minded; unmanageables of higher type. Homes were unfit by immorality and ill-treatment. The dependents were all

under 13 years. The stealers were truthful, but lacked power of adjustment; the forgers untruthful. *Sexual immorality* was the most serious and frequent offence—280 cases; the causes low intelligence, unsuitable early training or later associates. They classify on (1) intelligence; (2) attitude toward the crime; thus (a) I. Q. 48 to 55, incapable of comprehending the situation, ignorant of sex and birth facts; if aggressors spontaneously not purposefully so; analogous to the enticement of an 8-year-old child; (b) I. Q. 55 to 70, directly due to associates, aware of acts but unconcerned; untrained to the life situations they meet; (c) I. Q. 70 to 75, sufficiently trained, lacking self-direction and moral conscience; follow blind impulse; (d) I. Q. 75 to 85, recognising social alienation, feel regret, prefer the adventure and excitement; do not seriously consider the future; whether due to original nature or to experiences and training a matter of doubt; (e) I. Q. 85 to 95, mainly average normal; have ordinary training of their class; delinquency determined by unfavourable conditions; might have been moral in ordinary circumstances; (f) a few special cases, I. Q. 60 to 84, trained in immorality before puberty. *Prognosis*: the problem is serious but gaining recognition. The legal profession tend away from punishment. The courts have for eighteen years regarded delinquents, when minors, as not accountable for their acts, but are unsuccessful in juvenile reform. Training schools and reformatories have little success. Neither education authorities nor society appreciate the situation. This home studies individuals and then seeks to give training—(a) academic, to eighth grade public schools; (b) domestic, for home management or service; (c) elementary commercial. Parole is granted when suitable places are found. Of the 432 girls, 30 *per cent.* are hopeful and may become desirable members of the community; 40 *per cent.* require permanent custody or parole; 30 *per cent.* by disease, habits or temperament are not liable to reform. Favouring factors are the cleanliness of the homes and the protection from former ill-treatment. *Difficulties*: a sex lapse is not forgiven by the community; the respect for the marital relation is not readily reacquired. The laws of psychology tend against reform. Syphilitic cases are not fitted to have offspring. The admixture of varied cases prevents improvement. Psychological examination is a necessity for diagnosis. Parole cases in the main must be placed as domestic servants; there is a serious risk of false accusation without provocation against male members of the household; the best reputation may thus be ruined. There are few properly trained teachers available. The situation is, however, not hopeless, and will consistently improve as proper measures mature.

JOHN GIFFORD.

Part IV.—Notes and News.

MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

QUARTERLY MEETING.

THE QUARTERLY MEETING of the Association was held in the rooms of the Medical Society of London, 11, Chandos Street, London, on Thursday, February 24th, 1921, Dr. W. F. Menzies (President) in the chair.

Members present: Dr. W. F. Menzies (President), Major R. Worth (Hon. General Secretary), Sir R. Armstrong-Jones, Sir W. Job Collins, Sir Maurice Craig, Sir Frederick Mott, Sir George H. Savage, Drs. F. Beach, W. S. Birch, C. Hubert Bond, C. W. Bower, A. N. Boycott, A. Helen Boyle, W. M. Buchanan, J. Chambers, R. H. Cole, M. A. Collins, W. H. Coupland, A. W. Daniel, J. F. Dixon, J. H. Earls, H. Eggleston, C. F. Fothergill, S. J. Gilfillan, T. S. Good, H. E. Haynes, H. G. L. Haynes, R. W. D. Hewson, F. P. Hughes, W. B. Keith, R. Langdon-Down, N. Lavers, E. Lewis, J. R. Lord, J. McClintock, F. F. C. McDowall, S. E. Martin, J. M. Mathieson, J. Middlemass, A. A. Miller, E. Mapother, A. W. Neill, W. F. Nelis, H. J. Norman, D. Ogilvy, E. S. Passmore, N. R. Phillips, W. A. Potts, J. F. Powell, J. Rickman, B. H. Shaw, G. E. Shuttleworth, G. W. Smith, J. G. Soutar, R. H. Steen, J. Stewart, D. G. Thomson, E. B. C. White, J. R. Whitwell, J. K. Will, C. E. C. Williams, J. L. Wilson, Marguerite Wilson.

Visitors: Drs. C. Hayao, G. H. Johnston, A. A. Martin, T. Morowoka, F. Moyonha, E. Poynder, C. Uno.

Members present at the Council Meeting: Drs. C. Hubert Bond, W. M. Buchanan, J. Chambers, R. H. Cole, M. A. Collins, A. W. Daniel, J. R. Lord, W. F. Menzies, A. A. Miller, G. W. Smith, J. G. Soutar, R. H. Steen, D. G. Thomson, H. Wolseley-Lewis.

There were also present: Sir Maurice Craig, Drs. T. O. Wood and A. Helen Boyle.

Apologies for unavoidable absence were received from Drs. C. C. Easterbrook, J. Mills, J. P. Westrupp, J. Beveridge Spence, G. N. Bartlett, J. R. Gilmour, T. P. Cowen, M. J. Nolan, T. Stewart Adair, T. C. Mackenzie, W. B. Keay and D. Ross.

The PRESIDENT said that as Sir Frederick Mott wished to leave early, it would be convenient to hear him first and take the general business afterwards.

THE PATHOLOGY OF DEMENTIA PRÆCOX.

Sir Frederick MOTT, K.B.E., F.R.S., then gave a demonstration with the aid of microphotographs thrown on a screen by lantern on the pathology of dementia præcox, especially in relation to the condition of the ovaries, and descriptive of recent work done by himself with the collaboration of Dr. Hayao.⁽¹⁾

An excellent summary of his previous investigations appeared in the Journal for January this year (*vide* "Epitome," p. 22), following his communication to the Royal Society of Medicine on November 11th, 1919, and at the Cambridge Meeting of the British Medical Association, both of which excited the liveliest interest in the world of psychiatry. Sir Frederick Mott first gave an illuminating *résumé* of the whole subject in the light of the investigations he had conducted, and went on to describe further work in the same directions which he was continuing, which showed that similar basic changes occurred in the ovaries of female cases of dementia præcox confirmatory of those he had found in the testes of male cases.

(1) The whole ground of this subject was covered in the Morison Lectures, 1921, recently delivered by Sir Frederick Mott in Edinburgh, which we hope to publish in the July number.

Much interest was displayed in the case of a woman who suffered from dementia præcox following pregnancy and parturition. The pathological changes in the brain and ovaries were typical and well marked, showing that the biochemical changes were the outcome of a deficiency of germinal durability, the culminating factor being the stress of childbirth. The deficiency of lipid material was productive of failure of oxygenation in the nerve elements, with resultant deterioration of function and degeneration of structure.

His remarks were listened to with the closest attention, his audience recognising the great importance of Sir Frederick Mott's work in this direction, and the wide influence his views will have on our conception of the ætiology of the psychoses generally. The lantern-slides were excellent and the whole demonstration much appreciated.

On its conclusion the PRESIDENT said that he was afraid the subject was one on which there could not be much discussion. Sir Frederick Mott was a master, and the rest of them were in the position of humble pupils. At the same time, if anyone would care to say a few words the meeting would be glad to hear him. It would be especially pleasurable to hear from those gentlemen who had assisted Sir Frederick Mott. He thought that Sir Frederick Mott had really done the fundamental work in this matter of the endogenous toxins which determined certain conditions like dementia præcox. Other countries were not without a record of research, but he thought that foreign workers did not get to the bottom of things in the way that Sir Frederick Mott had done. The French had contented themselves with transplanting ovaries and testicles in fowls, and had found that whereas the transplantation of the testicle into the female fowl determined at once secondary male characters, the reverse operation into the male fowl only determined the female secondary characters at the next moult. Then the American observations on the shedding of the cortex of the suprarenal glands were not without significance; these showed that in the first four months the whole of the cortex was shed, but although that no doubt had a connection with the shedding of the first crop of hair in infants and the first and second moult in fowls, he thought nothing so fundamental had been done by these workers as Sir Frederick Mott was doing along another line of investigation. The Association would wish to express its thanks to him for coming and giving such a splendid demonstration.

Sir ROBERT ARMSTRONG-JONES said he believed that Sir Frederick Mott represented the organic or material origin of mental diseases. [Sir FREDERICK MOTT signified dissent.] Sir Frederick Mott disagreed, but he would remind the meeting that there were two schools: on the one hand there was the organic or the material school; and on the other the psychogenetic or mental school, which latter has been very much in evidence during and since the war. The latter school believed, among other things, that dementia præcox was entirely due to mental causes, and that epilepsy also had a similar origin. It was held by many that the abnormal mental states were due to subconscious complexes causing repression, and that this repression gave rise to conflicts involving a dissociated personality and so resulting in dementia præcox. He agreed with Sir Frederick Mott's view that this was a condition of congenital weakness, and he believed that the pathology had been much elucidated by the work so clearly placed before them.

Dr. M. A. COLLINS asked whether Sir Frederick Mott had found in every case of dementia præcox the change in the ovaries and testicles which he had described.

Dr. A. N. BOYCOTT asked what was the earliest age at which Sir Frederick Mott had noticed the changes occur, and also whether he could throw some light on the fact that these changes showed themselves in adolescence, although such must have been going on, without outward manifestation, probably for many years before that period. Or were there any earlier manifestations?

Dr. R. H. COLE said that he would like to put rather a different complexion upon what Sir Robert Armstrong-Jones had said about the two schools, the material and the psychical. He (the speaker), as a student of Dr. Maudsley, could not help feeling that when one talked about complexes and conflicts resulting in disorder one was not excluding a physical basis. With regard to the question of inborn or acquired disease, there must be a great many people going about, potential cases of dementia præcox, who did not, however, break down. The paper by Sir Frederick Mott would merely confirm the belief that the physical

basis of mental disorder was likely to be more fully demonstrated in the future. It was right that the two schools should go on, and that research should be made into these complexes and their physical basis.

Dr. T. S. GOOD asked whether Sir Frederick Mott found a distinct mental enfeeblement in every case. Was it only in the feeble-minded that he found the condition which he had illustrated? Were the other cases free from it?

The PRESIDENT asked whether Sir Frederick Mott, having demonstrated the want of oxygenation, especially in the granular layers, had found any difference in the amount of oxygenation perceptible between cases of dementia præcox and normal brains? Was there evidence of defective oxygenation in the granular layers, whatever part of the central nervous system was under consideration, *e.g.*, spinal cord or cerebellum?

Sir FREDERICK MOTT, in reply, said that Sir Robert Armstrong-Jones seemed to have taken up his point of a material side in the causation of dementia præcox. The speaker was glad that Sir Robert was coming round to that view, because some time ago he would not have it at any price. It was not sufficiently realised that this was not a disease limited to civilised people. None of the functional neuroses or psychoses were. It was present in all parts of the world, as shown in a recent communication by Sir John Macpherson to the *Journal of Mental Science*. It was a curious thing that among uncivilised people the dementia præcox took a different type. These people did not get auditory hallucinations. Their mental furniture was not the same as our own. They were analphabeten; abstract thought by linguistic auditory symbols did not form an important part of their mental furniture; they thought in concrete images. But it was the same disease. And the fact that it occurred among these uncivilised people seemed to him to show that it was fundamentally a physiological disorder. One fact, if anything was shown during the war, was the importance of the inborn tendency to the production of psychoses and neuroses. With regard to the question asked him by Dr. Collins, probably Dr. Collins had not read his recent paper in the *British Medical Journal*. If he had, he would have found that he had mentioned there cases of the very earliest stage in which no definite evidence could be found except that he thought under the microscope the heads of the spermatozoa when being formed showed a biochemical and morphological change which would not be seen in the normal testicle. In the case of the ovaries, he instanced again the young woman who was married and had a child, when, being unable to stand the strain of that, the exhaustion took place and degeneration occurred. He fully admitted the importance of looking at the whole matter from the mental side as well as the physical, but he must emphasize the fact that if they were going to get any further forward in their knowledge of the disease the physical side must be looked to. All psychical processes were subordinate to physiological processes. There could not be mind without memory, or memory without body. The sex instinct was stamped on the whole body—of the female, in female characters, and of the male in male characters—and this showed itself in many ways. He thought there was no doubt about it that there were two types—a more or less congenital imbecile type, and also a type represented by the person who got into the seventh standard of the school and then broke down. Then there was no doubt about it—and he thought some of the cases he had brought forward proved that point—that there were cases in which there had been such complete regressive atrophy that there was not a sign of spermatozoa—no development of spermatozoa at all. He was not responsible for the diagnosis in some of these cases; he wished he had seen them, but certainly the notes of most cases satisfied him that they were cases of dementia præcox, and certainly cases of adolescent onset, because there could not be a mistake about the age of onset and the subsequent development. But there were cases of confusional insanity which might give the symptoms of a case of dementia præcox, and might be diagnosed as such until it was afterwards discovered that they were not. He thought that some of the cases which got well were wrongly diagnosed at the beginning. He did not see how cases could get well if they started with this initial inborn condition, which meant a lack of psycho-physical energy through the whole body. It was known that people suffering with dementia præcox could not resist infective disease. Nearly all the cases he had had died of pulmonary tuberculosis. It seemed as though that fact would coincide very well with what

was known with regard to the diminished psycho-physical energy of the whole of the cells of the body.

At the conclusion of the demonstration and discussion the business on the agenda was taken.

The minutes of the last meeting, having already been published in the Journal, were taken as read and duly confirmed.

The PRESIDENT said that the Dinner would not be held owing to the small number of members who had intimated their intention of attending.

CONGRATULATIONS TO SIR MAURICE CRAIG.

The PRESIDENT said that the Association would desire heartily to congratulate Sir Maurice Craig on the honour His Majesty had conferred upon him. (Applause.)

MINISTRY OF HEALTH (MISCELLANEOUS PROVISIONS) BILL, CLAUSE 10.

The PRESIDENT then called upon Dr. Wolseley-Lewis to explain the action of the Parliamentary Committee on the recent Ministry of Health (Miscellaneous Provisions) Bill.

Dr. WOLSELEY-LEWIS said that at the Parliamentary Committee that morning the decision of the Association at the last meeting was recalled. It would be remembered that a telegram was sent to say that the Association would rather that the Minister of Health should drop Clause 10 of the Miscellaneous Provisions Bill altogether than pass it in the form in which it was likely to be passed. The reason for this was that it was felt that Clause 10 did not carry out at all the views of the Association. The matter had been further under discussion, both in the Parliamentary Committee and in the Council, and it was the unanimously expressed opinion that the Association would not like to convey to the authorities the idea that it had lost interest in this subject with the collapse of the Bill. It took a year's work of special committees to formulate this report, which was very carefully worded, and they were still very anxious to do everything they could to promote legislation on the lines of that report and which would facilitate the treatment of incipient mental disorder. He moved: "That the Association desires to press upon the Government the urgent necessity for legislation for facilitating the treatment of incipient mental disorder in harmony with the report of the Association, and that the matter should be dealt with in a separate Bill."

Dr. R. H. COLE seconded. He hoped that this would be the opinion which the Medico-Psychological Association would agree to press upon the Government.

This resolution was carried unanimously.

Dr. COLE further moved that this resolution be sent by the General Secretary to the following authorities: The Ministry of Health, the Board of Control and the Lord Chancellor.

The PRESIDENT said that this would be done.

AMENDMENTS TO THE ASYLUMS OFFICERS' SUPERANNUATION ACT.

The GENERAL SECRETARY said that this matter had been before the Parliamentary Committee that morning, and that Committee recommended that the Association should do all that it could to secure fundamental amendments: first, that the estimation of pensions be on a basis of three years instead of ten years; and second, that asylums committees be compelled—not allowed, but compelled—to compensate the dependents of officers dying when entitled to pension.

The PRESIDENT said that he felt sure the meeting would approve of the proposed amendments.

Agreed.

DEPUTATIONS ON MEDICAL MATTERS TO THE MINISTRY OF HEALTH, ETC.

The PRESIDENT referred to a letter which had been received from the British Medical Association and considered by the Council. The Minister of Health had recently indicated to the medical profession that he would on all medical matters relating to public health receive a deputation, provided the deputation was representative of the profession, but that he would not receive the profession sectionally.

This intimation had been sent to the Federation of Medical and Allied Societies and to the British Medical Association. The former had fallen in with it, but the British Medical Association had thrown over the subcommittee's report and claimed to represent the profession. The British Medical Association had written a letter to the Medico-Psychological Association on the subject, but the Council had decided to recommend to the members that the Medico-Psychological Association was willing to take part in any combined standing consultative body of the profession within the fold of the Federation of Medical and Allied Societies. The Association was already a member of that Federation, and thought it should be true to that body. The Council recommended that the General Secretary be asked to intimate to the British Medical Association that this was the position. The Association was willing to co-operate, but under the ægis of the Federation and not under that of the British Medical Association.

Agreed.

OBITUARY REFERENCES.

The PRESIDENT reported that a valued member had been lost to the Association in Dr. David Yellowlees, who was a very old member indeed, having graduated in 1857 and first commenced to practise psychiatry in 1863. Dr. Yellowlees was a man who was imbued with all that was best in the specialty, a man of great breadth of sympathy, of high character, of great professional attainments, of social qualifications beyond the ordinary, and whose whole life was spent in doing good. Although as a rule when they passed an obituary resolution they did it under a very deep shadow, in this instance they had rather a feeling of thankfulness that a long and useful life was allowed to come to its natural summation, and that he came to die full of age and honours. His memory would ever be green. He moved that the General Secretary be asked to send the condolences of the Association to his widow and family.

This was carried, the members standing.

THE SECOND MAUDSLEY LECTURE.

The PRESIDENT announced that Sir Frederick Mott had consented to be the second Maudsley lecturer and to deliver the lecture at the May meeting. (Applause.)

ELECTION OF MEMBERS.

Dr. R. H. Steen and Lt.-Col. J. R. Lord acted as scrutineers for the election of new members. The following were voted upon *en bloc* and were duly elected :

DAVIES-JONES, CHARLES WILLIAM SAUNDERSON, M.B., Ch.B.Edin., Ashhurst Hospital, Littlemore, Oxford.

Proposed by Drs. T. S. Good, G. N. Bartlett and Neill.

MACLEOD, NEIL, M.B., Ch.B.Edin., Assistant Physician, Royal Edinburgh Asylum ("Craig House"), Morningside Drive, Edinburgh.

Proposed by Drs. G. M. Robertson, H. Yellowlees, and W. McAlister.

BUZZARD, EDWARD FARQUHAR, M.A., M.D.Oxon., F.R.C.P.Lond., Physician, St. Thomas's Hospital, 78, Wimpole Street, W. 1.

Proposed by Sir Maurice Craig, and Drs. J. Chambers and R. Worth.

ALASTAIR, ROBERTSON GRANT, M.B., Ch.B., Assistant Medical Officer, County Asylum, Whittingham, near Preston.

Proposed by Drs. R. M. Stewart, R. M. Clark, and D. Orr.

REARDON, ARTHUR FRANCIS, L.M.S.S.A.Lond., Deputy Medical Superintendent, County Mental Hospital, Cambridge.

Proposed by Drs. M. A. Archdale, R. Worth, and G. Warwick Smith.

SKENE, LESLIE HENDERSON, M.C., M.B., Ch.B., Dipl. Psych. Edin., Medical Superintendent, Criminal Lunatic Department, Perth; "Glenpark," Edinburgh Road, Perth.

Proposed by Drs. F. Watson, H. Yellowlees, and W. McAlister.

GRAY, JOSEPH PEREIRA, M.D.Brux., M.R.C.S., L.R.C.P.Lond., Medical Officer, Exeter Poor Law Institution; 3, Northernhay Place, Exeter.

Proposed by Drs. R. Worth, W. F. Menzies, and J. Chambers.

KITCHEN, JOHN EDWARD, L.R.C.P. & S.Edin., L.R.F.P. & S.Glas., Assistant Medical Officer, Storches Hall Asylum, Kirkburton.

Proposed by Drs. T. Stewart Adair, R. C. Stewart, and J. K. Gilmour.

BEATON, THOMAS, O.B.E., M.D., M.R.C.P.Lond., Senior Assistant Physician, Bethlem Royal Hospital, London, S.E.

Proposed by Drs. J. G. Porter Phillips, R. Worth, and G. Warwick Smith.

FLEMING, GERALD WILLIAM, M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, Ryhope Asylum, Sunderland; Sunderland Mental Hospital, Ryhope, Sunderland.

Proposed by Drs. J. Middlemass, C. Hubert Bond, and C. F. Barham.

CALDICOTT, CHARLES HOLT, M.B.E., M.B.Lond., M.R.C.S., L.R.C.P.Lond., Grantbourne, Chobham.

Proposed by Drs. G. W. B. James, R. H. Cole, and R. J. Stillwell.

SEVERN, A. G., MILLOTT, M.D.Brux., M.R.C.S., L.R.C.P.Lond., F.C.S., Jesus College, Cambridge.

Proposed by Drs. R. C. Stewart, J. Francis Dixon, and A. T. W. Forrester.

FULLER, H. H. CAVENDISH, M.B., Ch.B.Edin., Medical Officer, Malvern College; "Oakdale," Priory Road, Great Malvern.

Proposed by Drs. J. Chambers, J. C. Woods, and R. Worth.

ADAMSON, JAMES WEEDEN WOODHAMS, M.D.Durh., M.R.C.S., L.R.C.P. & L.S.A.Lond., Senior Neurologist, Ashhurst Hospital, near Oxford.

Proposed by Drs. T. B. Hyslop, J. McClintock, and R. Worth.

SCOTTISH DIVISION.

THE SPRING MEETING of the Scottish Division was held in the Hall of the Royal Faculty of Physicians and Surgeons, Glasgow, on Friday, March 18th, 1921.

Present: Drs. R. B. Campbell, Chambers, Crichtlow, D. K. Henderson, Hotchkis, Leggett, J. H. MacDonald, G. D. McRae, W. L. Martin, D. McKinley Reid, G. D. Robertson, Ross, C. J. Shaw, A. G. W. Thomson, H. F. Watson, Whitelaw and W. M. Buchanan, Divisional Secretary.

Dr. R. B. Campbell was called to the chair.

Before taking up the ordinary business of the Meeting, the CHAIRMAN referred in appropriate terms to the great loss which the Association and the Specialty of Psychiatry had sustained through the death of Dr. David Yellowlees, a distinguished alienist, and for twenty-seven years Physician-Superintendent of the Glasgow Royal Asylum, Gartnavel. Dr. Yellowlees was the oldest member, and a former President of the Association, and had always taken an active and kindly interest in the affairs of the Scottish Division. Dr. Hotchkis, in endorsing the Chairman's remarks, paid a high tribute to Dr. Yellowlees' many fine personal qualities, and Dr. Shaw spoke of the inspiration his personality had proved to the younger members. It was unanimously resolved that it be recorded in the Minutes that the members of the Scottish Division of the Medico-Psychological Association desire to express their deep sense of the loss sustained by the death of Dr. Yellowlees, and their sympathy with the members of his family in their bereavement, and the Secretary was instructed to transmit an excerpt of the Minute to Mrs. Yellowlees.

The Chairman also fittingly referred to the sad and premature death of Dr. Maxwell Ross, Physician-Superintendent of James Murray's Royal Asylum. It was unanimously resolved that it be recorded in the Minutes that the Members of the Scottish Division of the Medico-Psychological Association desire to express their deep sense of the loss sustained by the death of Dr. Maxwell Ross, and their sympathy with the members of his family in their bereavement, and the Secretary was instructed to transmit an excerpt of the Minute to Mrs. Ross.

The Minutes of the last Divisional Meeting were read and approved, and the Chairman was authorised to sign them.

Apologies for absence were intimated from: Drs. Alexander, Bartlett, Carre, Devine, Gilmour, Kerr, Tuach Mackenzie, Oswald, Steele, and D. G. Thomson.

The SECRETARY submitted a letter from Dr. Maxwell Ross's father, acknowledging, on his son's behalf, the resolution of sympathy passed at the last Meeting.

The SECRETARY submitted a letter from the Secretary of the Parliamentary Committee of the Association, intimating that that Committee had endorsed all the Amendments suggested by the Scottish Division to the Asylums Officers' Superannuation Act (1909), but expressing the opinion that there was no chance of an amending Bill for another year. The Secretary was instructed, in acknowledging the letter, to request that the amendments of the Scottish Division may be kept before the Parliamentary Committee, so that their inclusion may be pressed for in any amending Bill that may be introduced.

Drs. C. J. Shaw and J. H. MacDonald were unanimously elected Representative Members of Council for the ensuing year, and Dr. W. M. Buchanan was elected Divisional Secretary.

Dr. Donald Ross was recommended to the Educational Committee of the Council as an examiner for the Certificate in Psychological Medicine.

The following candidates, after ballot, were admitted to membership of the Association:

CONNELL, ERNEST HENRY, M.B., Ch.B.Edin., Clinical Assistant, Royal Asylum, Edinburgh.

Proposed by Drs. G. M. Robertson, W. McAlister, and H. Yellowlees.

DICK, ALEXANDER, M.C., M.B., Ch.B.Glas., Assistant Medical Officer, Glasgow District Mental Hospital, Woodilee, Lenzie.

Proposed by Drs. Carre, Dryden, and Buchanan.

DUNLOP, GEORGE WILLIAM CUNNINGHAM, M.B., Ch.B.Edin., Senior Assistant Medical Officer, District Asylum, Inverness.

Proposed by Drs. T. C. Mackenzie, Hotchkis and Buchanan.

JARDINE, MAURICE KIRKPATRICK, M.B., Ch.B.Edin., Assistant Medical Officer, Fife and Kinross District Asylum, Cupar.

Proposed by Drs. J. H. Skeen, Hotchkis, and Buchanan.

THOMSON, AIDAN GORDON WEMYSS, M.B., Ch.B.Glas., Assistant Medical Officer, Glasgow Royal Asylum, Gartnavel.

Proposed by Drs. D. K. Henderson, Oswald, and Buchanan.

WHITELAW, WILLIAM, M.B., Ch.B.Glas., Director, Western Asylums Research Institute, 10, Claythorn Road, Glasgow, W.

Proposed by Drs. D. K. Henderson, Oswald, and Buchanan.

Dr. WILLIAM WHITELAW read an interesting and instructive paper on "The Colloidal Gold Reaction in the Cerebro-spinal Fluid," which was discussed by Drs. J. H. MACDONALD, ROSS, FERGUSON WATSON, D. K. HENDERSON and BUCHANAN.

A vote of thanks to the Chairman for presiding concluded the business of the Meeting.

PARLIAMENTARY NEWS.

December 21st 1920: Ex-service men in asylums.—Mr. LEONARD LYLE asked the Minister of Pensions if his Department made any payments in connection with ex-service men who were in any asylums whatever in the country for the treatment of mental disease; why, if this was the case, both his Department and the Ministry of Health abstained from giving figures; whether the number of such men had been stated officially to be inconsiderable: and whether it was possible, in view of payments made by his Department, to give the public reliable information on the matter.—Mr. IAN MACPHERSON replied: I would draw my honourable friend's attention to the replies given to the honourable Member for Frome on June 28th and to the honourable and gallant Member for Gateshead on July 30th last. From these it will be seen that ex-service men confined in asylums and suffering from certifiable insanity due to war service, are, by special arrangements treated as service patients with all the privileges of private patients. Their number, on December 9th was, I regret to say, 5,634. The entire cost of their maintenance and treatment is borne by my Department, and, in addition, treatment allowances are made on substantially the same basis as in other cases of in-patient treatment.

December 23rd: Section 79 of the Lunacy Act, 1890.—Mr. FREDERICK ROBERTS asked the Minister of Health whether he intended to have Section 79 of the Lunacy

Act, 1890, posted up in the waiting-rooms of pauper asylums, since this step had been now for some time under the consideration of the Lunacy Board; and if so, when would this commence.—Dr. ADDISON replied: I am advised that this proposal is by no means free from difficulties, and that there is much difference of opinion among experts as to its advisability. But the Board of Control have now completed their inquiries and I hope to receive their considered recommendation early in January.

February 21st, 1921: Maintenance of patients in mental hospitals.—Mr. FINNEY asked the Minister of Health whether his attention had been drawn to a resolution of a meeting of Poor-Law Guardians of the Wolstanton and Burslem Union, Staffordshire, calling attention to the increasing charges on the rates and with special reference to the recent increase for the charge in the maintenance of patients in the mental hospital from 28s. to 35s. per week, and to the fact that the Exchequer contributions, as fixed under the Local Government Act, 1888, remained the same, and the grant, notwithstanding the enhanced cost of maintenance, for patients in mental hospitals still remained at 4s. per week per patient, which grant of 4s. was fixed originally when the average cost of maintenance would be from 8s. to 9s., whereas it was now four times the amount, and in addition the establishment and other charges included in the precepts received by guardians from county councils increased considerably the amount of 35s. weekly, and protesting most strongly against these increasing burdens without some adequate or comparative increase in the amount of the grants allowed, and pressing that some definite action be taken by the Government to make some recompense and appease the indignation caused by such increasing charges on the rates; and whether he could indicate the intentions of the Government respecting the same.—Dr. ADDISON replied: I have received a copy of this resolution. As I stated in reply to numerous questions asked last session on this subject it would not be practicable, in view of the contemplated reform of the Poor Law, to deal with this particular matter at the present time.

March 10th: Amendment of Lunacy Laws.—Mr. ALFRED DAVIS asked the Minister of Health if his attention had been drawn to a resolution passed by the Committee of Visitors for the Isle of Ely and Borough of Cambridge Mental Hospital; that in the opinion of the visitors the use of the terms "pauper lunatic" and "pauper lunatic asylum" should be discontinued, and that the Ministry of Health be asked to procure an amendment of the Lunacy Acts, substituting the terms "patient" and "mental hospital"; and whether, in view of this essential reform, he would give this matter his careful consideration.—Dr. ADDISON replied: I am in sympathy with the spirit of the resolution, but it would require considerable amendment of the Lunacy Acts to eliminate these terms altogether, and I am afraid that any substituted terms would tend to acquire the same associations.

EDUCATIONAL NOTES.

Henderson Research Scholarship in Mental Diseases.—This Scholarship has been founded in the interests of persons affected by nervous or mental diseases.

The generous donor's desire to encourage research into the causation and prevention of these diseases is worthy of the widest publicity.

The fund is to be administered by a Board of Trustees, with James Johnston, Esq., C.A., 190, West George Street, Glasgow, as Secretary.

The value of the Scholarship is £250 per annum, tenable for one year or less, and annually renewable for a maximum period of three years.

The field of research is of the widest possible scope—clinical, pathological, psychological, neurological and sociological, as touching the subject.

The candidate must be a graduate in medicine of a British University, college or school, or intimately engaged in the study of mental defect as a social problem. Aptitude for original research is necessary, and the scholar should devote his whole time to the investigation. Failing this, grants may be given to part-time workers.

Applications for the Scholarship to be made to the Secretary, stating name, age, address, birth-place, qualifications, honours or distinctions, present and past

appointments, with recommendations from two recognised specialists in this particular branch of medicine

The Maudsley Hospital.—Lectures and practical courses of instruction for a diploma of psychological medicine, third course, 1921.

Part I.—Eight Lectures on the Anatomy of the Nervous System. By Sir Frederick Mott, K.B.E., M.D., LL.D., F.R.S., F.R.C.P. On Tuesdays, at 2.30 p.m., commencing on April 5th, 1921. The evolution of the nervous system in the animal series—physiological levels—macroscopic and microscopic anatomy of the nervous system—the neurone concept—the projection, association and autonomic systems—ultimate distribution of the cranial nerves, spinal nerve-roots and sympathetic nerves—the meninges—cerebral arteries and their distribution—the intracranial venous and lymphatic systems—the congruence of structure and function in the brain—the congruence of experimental investigation with anatomical observation—the clinico-anatomical methods of investigating the functions of the central nervous system, spinal cord, medulla oblongata, pons, cerebellum, mesencephalon; basal ganglia, cerebral hemispheres—the cortex cerebri in relation to cerebral localisation, including the cerebral mechanism of speech—the structure of the endocrine and reproductive organs.

Practical Instruction and Demonstrations.—Methods of staining nervous tissue and preparing it for microscopical examination—the living nerve cell—the nerve fibre—degeneration and regeneration of nerves—distribution of sections, illustrating the principal diseases of the nervous system, for mounting as a permanent collection.

Eight Lectures on the Physiology of the Nervous System. By F. Golla, M.D., F.R.C.P., Physician, St. George's Hospital. On Fridays, at 2.30 p.m., commencing on April 8th, 1921. Reflex action—co-ordination and proprioceptive system—motor system, including muscle and nerve—sensation—fatigue—localisation and reference of sensation, normal and abnormal—special senses—mental work and fatigue—methods of investigation—physiology of the emotions—endocrinology—the autonomic system—action of alcohol and drugs—physiological chemistry—trophic and vegetative functions.

Practical Instruction and Demonstrations.—*Physiological chemistry*: Chemistry of the nervous system, and cerebro-spinal fluid—nitrogen and phosphorus metabolism—abnormal constituents of urine—physico-chemical methods as applied to bio-chemical research—blood analysis: sugar, chlorides, ash constituents, etc.—gastric contents analysis.

Practical physiology: Physical concomitants of emotion—recording reflexes and tremors in man—action of drugs on autonomic system—the study of reflex action in the spinal animal.

Eight Lectures on Psychology. By Henry Devine, M.D., F.R.C.P. On Thursdays, at 2.30 p.m., commencing on April 7th, 1921. Definition and scope of psychology—behaviour—adjustment—classification of responses—instinct—habit—thought—relation of mind and body—the psycho-physical organisation as a biological unit—integration—methods of psychological investigation—analysis and classification of modes of consciousness—cognition—sensation—perception—imagination—memory—association—judgment—conation—attention—volition—affection—emotion—mood—sentiment—personality—temperament—character—sleep—dreams—suggestion—hypnosis—dissociation—illusion—hallucination—delusions—disorders of attention—fatigue—effects of drugs on reactions.

Practical Instruction and Demonstration.—Sensation—psycho-physical methods—statistical methods—reaction times—association memory—intelligence tests—muscular and mental work.

Part II.—Part II will follow in October, 1921, and will include lectures and demonstrations on the following subjects. A further announcement will be made as to times and lecturers.

- (1) The Diagnosis, Prognosis and Treatment of Mental Diseases.
- (2) Mental Defect and Crime.
- (3) The Practical Aspect of Mental Deficiency.
- (4) Pathology of Mental Diseases, including Brain Syphilis, its Symptomatology and Treatment.
- (5) The Symptomatology of Mental Diseases.
- (6) The Psycho-neuroses.
- (7) Demonstrations in Neurology.

reasonable expenses incurred in sending medical officers to the course. After consultation with the Board of Education it has been ascertained that the Board would not desire to offer any objection to the payment out of funds applicable for the purpose of Part II of the Education Act, 1902, *i.e.*, higher education, of any expenditure consequential on the attendance of school medical officers at those lectures which can legally be paid under the Education Acts.

THE MENTAL AFTER-CARE ASSOCIATION.

THE Annual Meeting of the Mental After-Care Association, which has done much valuable work during the last forty years in aiding the restoration to ordinary mundane activities of large numbers of poor persons discharged convalescent or recovered after treatment in mental hospitals, was held on February 24th at Bridewell Royal Hospital. Alderman Sir Charles Wakefield, Bt., who presided, after giving examples of the beneficent results of the Association's operations with the very limited funds at its disposal, announced his generous intention to defray the deficit of £70 outstanding at the end of last year. The report was read by Dr. Henry Rayner (Chairman of the Council), and its adoption moved by the Right Hon. Sir William Byrne, Bt. (Chairman of the Board of Control), who drew attention to the great value of the timely help and assistance on discharge of necessitous patients in consolidating recovery and preventing relapse, incidentally referring to the high character of the services of the staffs of our asylums, sometimes ungraciously impugned by certain irresponsible sections of the press. The motion was seconded by the Bishop of Barking and carried. The re-election of the officers was proposed by another member of the Board of Control, Dr. Hubert Bond, C.B.E., and seconded by the Hon. John Mansfield (Lord Chancellor's Visitor), and the adoption of the balance-sheet, which showed an aggregate income for 1920 of £3,061 15s. 8d. (more than half of which was derived from charitable sources), was moved by Mr. Gabain and seconded by Sir George Savage, M.D., Treasurer of the Association. A hearty vote of thanks to Sir Charles Wakefield for presiding and for his generous donation closed the proceedings.—*British Medical Journal*, March 5th, 1921.

THE BRITISH JOURNAL OF PSYCHOLOGY: MEDICAL SECTION.

THE first number of this new Journal has recently been published. Dr. T. W. Mitchell is the Editor, and he is assisted by Drs. Ernest Jones, Constance Long, George Riddock and W. H. R. Rivers. Dr. Pierre Janet contributes the first paper, entitled "La Tension Psychologique, ses degrés, ses oscillations." It is evidently not intended to translate contributions by foreign writers, and there is something to be said for this policy when the language is one with which most educated people are familiar. Discussions on "The Revival of Emotional Memories and its Therapeutic Value" form the subject of four articles by Drs. William Brown, Charles S. Myers and W. McDougall. Dr. Constance Long contributes an article on "Psychological Adaptation," and Dr. Ernest Jones writes an important *résumé* of the recent advance in psycho-analysis. Dr. G. Stanford Read contributes a comprehensive review of the clinical studies of Pierre Clark on the "Pathogenesis of Epilepsy." A number of book reviews, abstracts and notes on the contents of recent periodicals conclude the number.

We have also received the second number of the Journal, which includes several contributions of interest and value.

LIMERICK DISTRICT ASYLUM: A CORRECTION.

IN our last issue certain Mental Hospital Reports for the year 1919 were commented upon. Amongst these was one concerning Limerick District. Regret was expressed that the exact number of the report was omitted. Inadvertently the words "from the title-page," which is the usual position, did not appear. The Resident Medical Superintendent, Dr. Irwin, gives prominence to the number, which is the 92nd, at the head of his annual summary to the Committee of the Institution. This would entitle the hospital to the honour of being one of the oldest district institutions of its kind in Ireland.

THE BURNING ACCIDENT AT AN ASYLUM.

BARANOWSKA *v.* CAMBERWELL HOUSE, LIMITED.

KING'S BENCH DIVISION. BEFORE MR. JUSTICE SANKEY.

IN this action Miss Maude Baranowska claimed damages from Camberwell House, Limited, the proprietors of a private asylum, for personal injuries received while she was a patient there, through the alleged negligence of the defendants or their servants.

The plaintiff was an actress. In 1919 she developed suicidal tendencies, and in August of that year she was placed in the defendants' home for treatment. Eventually she left the home, cured, on March 3rd, 1920.

Mr. Disturnal, K.C., and Mr. A. F. Clements appeared for the plaintiff; Mr. Hogg, K.C., and Mr. Robert Fortune for the defendants.

Mr. DISTURNAL said that the plaintiff had been trained as an actress in Sir F. R. Benson's school, and owing to the burns she had been unable to follow her profession. She must, of course, prove a breach of duty, but in a case like this a patient was detained for the express purpose of receiving the care and protection from her own infirmity which she was not able to give herself. To leave a ward—especially an observation ward for dangerous cases—without supervision showed a gross dereliction of duty by the nurse, and was a direct breach of the printed instructions to nurses, one of which read: "No ward must at any time under any pretext be left without a nurse so long as there are patients in it." Further, the kitchen door should have been kept locked. The rules required nurses to lock all doors. The authorities of the home knew of the plaintiff's tendencies, as it was not the first time that she had been an inmate. Moreover, a few weeks before the burning she had been moved into an ordinary ward, but after she had hidden herself for some hours in a cupboard she was put back in an observation ward.

Mrs. BARANOWSKA, the plaintiff's mother, mentioned earlier attempts at suicide, and three previous visits to Camberwell House. After her previous illnesses she had taken up her profession again, but since the burns she had not been strong enough. Moreover, she usually played parts which required the wearing of evening dress, but that was now impossible as the burns would show.

THE PLAINTIFF'S EVIDENCE.

The plaintiff also gave evidence. She said that her first illness of this nature was in 1911. She described the observation ward, in which she occupied a bed between the fireplace and the door leading to the kitchen and lavatories. She remembered getting up in the early morning and going and looking in at the kitchen door where she saw the light. The nurse was not near. When her clothes caught fire she rushed into a linen cupboard, and stayed there until the pain became too acute, when she rushed back into the ward and the nurse threw a blanket round her and extinguished the flames. The kitchen door was usually kept locked. She was still unfit for anything but a very quiet life.

CROSS-EXAMINED: She had not tried to get any stage engagement since March, 1920. When she first went to Camberwell House she was placed in the infirmary; she was then suffering from a wound in her throat. It was not true that that was still being bandaged after the burning episode. She was moved to the terrace, which was supposed to be for convalescent cases. After the cupboard incident she was moved to another ward. It might have been called Orchard House, but she had heard the term "observation ward" from the nurses themselves. Several of the patients in her ward were "ticketed" as requiring special observation.

Medical evidence of the plaintiff's injuries was given by Dr. Gervis, who said that the scars would be permanent.

CROSS-EXAMINED: He had sent several mental cases to Camberwell House, which had a good reputation. The colour of the scar might alter in time from red to white.

Mr. HOGG: Could she not cover it with make-up—grease-paint or whatever actresses use?

Dr. GERVIS: That is not much in my line. (Laughter.)

In reply to the JUDGE, the witness said that the anxiety of this case might be a cause of the witness's making a slow recovery.

Mr. HOGG: It is a question on which medical men might honestly hold different opinions.

The WITNESS: I believe a good many are to be called this afternoon and I am looking forward to reading their views in the evening newspapers. (Laughter.)

Dr. F. S. TOOGOOD gave corroborative evidence. He said that two of the burns were of the fourth degree, that was, the whole skin was destroyed—and in such cases there was some risk of a malignant growth.

The WITNESS agreed that mechanical restraint was prejudicial to a cure; he did not altogether agree that there was sometimes a choice between a cure and prevention of all risk.

In re-examination Dr. Toogood said that in no case should a suicidal patient be allowed anywhere near a naked flame.

Dr. BENJAMIN JONES, a specialist in skin diseases, said that there was a possibility that the scars would get worse and even malignant.

THE DEFENDANTS' CASE.

Mr. HOGG said that Camberwell House, Limited, had carried on the asylum for a great number of years. Actively suicidal patients were put in the infirmary, where elaborate precautions were taken. As they improved they were of necessity gradually put in conditions of greater freedom. Short of mechanical restraint, which modern ideas did not tolerate except as a very temporary measure in extreme cases, it was impossible to be sure that a person bent on self-destruction could not effect his purpose. It was said that an asylum which had no suicides would have no cures. In this case Miss Baranowska was seemingly well on the road to recovery. The kitchen was put in at the request of Sir Frederick Needham, one of the Board of Control. It was not usually kept locked. On the day in question the nurse was engaged in washing a patient and Miss Baranowska slipped out and set herself alight. It was right to add that there was no such thing as an "observation ward," but in the case of actively suicidal patients a "caution ticket" was issued, which was signed by each nurse who took charge of the patient to show that she had had her attention drawn to the case. When Miss Baranowska first came to the infirmary she was "ticketed," but when she was moved to the terrace as convalescent the ticket was withdrawn, and was not restored when she went to Orchard House, but through some misapprehension the nurse was under the impression that she was "ticketed," and she actually received the supervision appropriate to a "ticketed" patient.

Nurse CLAMP, the nurse on duty at the time of the accident, said that she was the night nurse, and was alone on duty except for visits from the head nurse. During the night she usually kept the kitchen door locked, as patients had to pass it in going to the lavatory. In the daytime it was usually left unlocked. There was no rule on the subject. About 5.45 in the morning she began getting hot water for the patients to wash themselves. She was washing an infirm old lady and she noticed that Miss Baranowska seemed to be asleep. Two or three minutes later she saw Miss Baranowska in the doorway in flames. She had not left the ward while she was on duty.

CROSS-EXAMINED: She had no special orders about Miss Baranowska, but at her own discretion she exercised special vigilance for a few nights. She knew that the plaintiff had been concealed in the cupboard for nine hours. As nothing happened for the first few nights she did not watch the plaintiff with the same vigilance. Her reason for locking the kitchen door at night was that she thought that patients might get into mischief. There was china in the kitchen as well as a gas ring which might be dangerous. It was the practice to have only one nurse on duty while the patients were being washed. She had never heard any suggestion that Miss Baranowska had run into the linen cupboard when her clothes caught fire.

The hearing was adjourned.

Dr. EDWARDS said that he had been on the staff of Camberwell House for twenty-eight years, and medical superintendent for twenty-two years. They were bound to take risks every day, as it was essential to give patients some liberty to see how far they were fit for return to civil life. At the present time about 10 *per cent.* were allowed out alone. That was a risk, as there might be a suicidal impulse and

a tragedy at any time. It was a great anxiety and responsibility for the staff, but, on the other hand, there would be no cures if patients were not allowed some freedom. He had never heard the phrase "observation ward" until it was used in Court yesterday—as the name of a ward. They called the ward for actively suicidal cases the "infirmary." It would be prejudicial to a patient to be told that she was in an "observation ward." The phrase was used to distinguish the wards which were under night supervision. The rule as to locking doors applied to outer doors. To lock the interior doors would be undesirable, as it would make the place like a prison. He had himself authorised the occupation of patients in the kitchen: it was constantly left unlocked, with his approval. It was quite a proper precaution for the nurse to lock it at night if she thought fit, but the omission to do so would not have exposed her to reprimand. He thought that there was no danger: whether there was danger in leaving it open when the gas was alight would depend on the patients in the ward.

THE CUPBOARD INCIDENT.

Dr. EDWARDS said that he was on his holiday when the plaintiff was admitted, and on his return he found that she had been removed to "The Terrace." There patients had a good deal of liberty. Describing the cupboard incident, the witness said that the terrace houses were eighteenth century houses with various unused cupboards. There was one in the plaintiff's bedroom, but her bed was pressed against the door, and as far as he (the witness) knew it had never been opened. On the day in question the maid moved the bed from the wall to sweep behind it, and she was called away. The plaintiff slipped up and got into the cupboard. The maid returned and placed the bed back in position, not knowing that Miss Baranowska was inside the cupboard. No one had any reason to suspect her presence there, and it was thought that she had escaped. She made no attempt on her life. She laughed when she came out at the fright which she had given them. His personal opinion was that Miss Baranowska's illness took the form of a desire to figure in the limelight, and that both the cupboard incident and the setting fire to her nightdress were due rather to that motive than to a desire to take her life.

CROSS-EXAMINED: He spoke in his letter of an "attempt at suicide" because he was not going to enter on a psychological discussion with a solicitor, and in common parlance it was an attempt at suicide, but his own view was that it was not. He was not deceiving the solicitor. He was familiar with the regulation requiring a case-book to be kept. He might look at it occasionally.

COUNSEL: Why is the cupboard incident not recorded in the case-book?

The WITNESS: I am a physician treating patients, not a clerk writing in records.

The WITNESS said that if he had known that the plaintiff had strong suicidal tendencies on September 29th he would not have allowed her to be in a ward with only one nurse at night, or in any ward where she could have access to a naked flame. Dr. Nuttall would be responsible for the case-book.

COUNSEL: Are we to have the pleasure of seeing Dr. Nuttall?

The WITNESS: If you release me to go back and take charge.

Miss WALLER, head sister in charge at Camberwell House, said that it was her duty to receive instructions from the doctors as to each patient and pass them on to the nurses in charge of the ward. When a patient was put "on ticket" she (the witness) handed the ticket to the nurse in charge of the ward. When the ticket was withdrawn it was brought to her (the witness) and destroyed. The plaintiff's ticket was withdrawn when she was sent to The Terrace.

Dr. NORMAN, Assistant Medical Officer at Camberwell House, said that he had had charge of Miss Baranowska on each occasion when she was a patient, and arranged for her admission in August, 1919. Dr. Nuttall issued the caution ticket. He did not regard the cupboard incident as suicidal.

CROSS-EXAMINED: He had doubt whether Miss Baranowska was suicidal; the episodes were so very histrionic.

Dr. R. H. COLE, the holder of numerous appointments connected with the care of the insane, said that he had inspected the ward and kitchen, which were of the usual type in institutions of the sort; he had passed similar arrangements as an official visitor under the Mental Deficiency Act. He agreed with the other medical witnesses as to the need of relaxing control.

Dr. W. H. B. STODDART said he had known Camberwell House for many years and sent patients there. The ward was quite a usual one. The cupboard episode was of the nature of a practical joke.

Dr. PORTER PHILLIPS, Physician Superintendent of Bethlem Hospital, gave evidence approving of the treatment given to Miss Baranowska. Before the accident he would not have thought that there was any risk in putting her in to the ward.

CROSS-EXAMINED: Miss Baranowska had been twice in his charge. She had not been suicidal. On paper her suicidal tendencies in August, 1919, were serious.

Mr. HOGG said that finished his case unless his Lordship desired to have Dr. Nuttall called.

Mr. JUSTICE SANKEY said that he thought Dr. Nuttall had better come. He would resume the case at 2 o'clock on Tuesday, and, if necessary, would sit late to finish it.

The hearing was adjourned.

COUNSEL having addressed the Court,

Mr. JUSTICE SANKEY said, in giving judgment, that the cause of action was a peculiar one. The plaintiff complained that after she had gone into the defendants' institution during an attack of insanity, they failed to discharge their duty of looking after her, and allowed her to set fire to herself. There was no dispute on the law; both parties were agreed that it was the duty of people in the defendants' position to take reasonable care of those in their charge; if they did so they were not liable even though a patient should suffer some injury; if they did not exercise reasonable care they were liable. The plaintiff's case is that she was placed in a ward called Orchard House, where she was able, while the sole nurse's back was turned to wash some old lady, to leave the ward and get to a kitchen where there was a hot-plate and a lighted gas-ring. The plaintiff set herself alight. The kitchen was placed there with the approval of the Board of Control. Had the plaintiff discharged the burden of proving that the defendants failed to take reasonable care? It was said on behalf of the defendants that it was impossible under modern conditions of thought to avoid some risk. He entirely agreed that there must be some liberty for the patients if they were to have a chance of cure. No doubt the maxim that had been quoted, "An asylum which never has a suicide never has a cure," went too far. The difficulty was to put himself in the position of the doctors before the accident. It was easy to blame them afterwards, but a mere mistake was not sufficient; there must be more than that. It did not follow that a man who was held liable was unreasonable; he might yet fail on one occasion to reach the usual standard of care. He (His Lordship) did not think that the leaving of a kitchen open by itself amounted to negligence; he did not think that the lighted gas by itself was negligence; he did not think that leaving the ward under one nurse by itself was negligence; but these things must be read in connection with each other and with this particular patient.

Dr. Edwards had persuaded himself that Miss Baranowska was not suicidal, but merely hysterical and fond of limelight; he had not persuaded him (His Lordship). He would not set up his opinion against that of Dr. Edwards, who had seen thousands of cases, while he (His Lordship) had happily not seen one. The reason why he was not convinced was the numerous entries in the documents referring to her as "suicidal." He did not understand insanity, but he did understand English. In the case-book, the caution ticket, and the letters, the plaintiff was described as "suicidal." The ticket was withdrawn when she went to "The Terrace." He thought that it might be better if tickets were kept and the date of withdrawal entered on them. If the plaintiff had set fire to herself while she was in The Terrace and was regarded as convalescent, he might have had considerable difficulty in finding in her favour. But on September 16th came an incident which evidently startled the doctors somewhat.

HIS LORDSHIP dealt with the cupboard incident, remarking that it caused him some surprise that it was not in the case-book.

Dr. Edwards had described the plaintiff as "mischievous, unreliable, hysterical, and not to be trusted." It was suggested that that was the case with all lunatics, but he thought that was not so. He had come to the conclusion that Orchard

House was not a proper place in which to put the plaintiff, bearing in mind her antecedent history. He came to the conclusion (without wishing to express any censure on this large and well-conducted establishment) that to put the plaintiff at that time in that ward with that open door and that gas and the single nurse was not taking reasonable care of her, and she was entitled to damages, which must be reasonable, and he awarded her £450, with costs.

Solicitors.—Messrs. Edwards and Son; Messrs. Dixon and Hunt.

(Abstract from *The Times*' report, March 18th, 19th and 23rd, 1921.)

CORRESPONDENCE.

MINISTRY OF HEALTH (MISCELLANEOUS PROVISIONS) BILL.

To the Editors of the JOURNAL OF MENTAL SCIENCE.

SIRS,—As I understand the "Occasional Note" on the above matter in the last issue of the *Journal of Mental Science* is not an official expression of opinion of the Medico-Psychological Association, it is unfortunate that the writer should claim to be voicing the views of the majority of the members of the Association. How he can say that the Ministry of Health Bill, Clause 10, would have been a retrograde step, and that it was "of doubtful efficiency as regards the incipient insane" and "decidedly reactionary as regards the certified insane" it is difficult to understand. It left untouched the treatment of the certified insane, as the Bill was not a Lunacy Act Amendment Bill, and its clauses were to facilitate the early treatment of mental disorder.

The writer of the note seems to have been nettled by certain observations made by some members of the House of Commons during the discussion of the Bill, but although he may have just grounds for his indignation, no branch of medicine can afford to delay its advance merely because the public has not learnt to appreciate the good work that is already being done in it. It is common knowledge that much mental disorder might be prevented if the cases came for treatment at an earlier stage of their illness. Clause 10 was an honest attempt to render this early treatment possible.

It is true that it did not go as far as the medical profession would have wished. The necessity of having a letter signed by the patient before he could be admitted to an approved Home limited and greatly lessened the value of the measure. The Minister himself knew this and appreciated the force of the argument of all of us who pressed for the omission of this letter, but on the other hand he knew also that the legal members of the House would oppose the Bill unless some such protection were included, and finally we had to say that we preferred a half measure rather than none at all. In Committee, Colonel Raw's amendment, that in the event of a patient's being unable to sign the letter the nearest relative should do so, was almost carried, indicating that we might look forward to relief from this restriction at some not distant date.

Some members of the Association were disappointed that the Minister did not bring in a voluntary boarder system for county and borough asylums. Whilst thoroughly in sympathy with this provision, he stated in Committee that it could not be dealt with under the present Bill, but only by a Lunacy Act Amendment Bill.

I find that an idea has got about that the privileges under this Bill were not to be extended to mental hospitals. It is not clear how this idea originated, but I can only say that I personally have always pressed, and the principle has always been accepted, that any concession as to early treatment should be enjoyed by all mental hospitals where special provision may be made for these cases, and by all licensed houses equally with any approved home which might be included under the Act if it passed.

I am not aware of any proposal for a new public department to deal with these cases, nor would such be necessary, while with regard to the writer's comment as to the Board of Control, it is clear that the Minister intended to avail himself of their knowledge and experience, as may be seen from the statement of Colonel Wilson, speaking for the Minister in Committee: "It is proposed by the Ministry that the inspection of these institutions shall be carried out by medical officers on

the staff of the Ministry, but it is obvious that the hands of the Ministry must be left free. In certain and very special cases it may be necessary to utilise the experience of the Board of Control, and the Minister should be left free to do so."

Unfortunately the treatment of mental disorder is a branch of medicine which more than any other is hampered by the exigencies of the law, and this has made our advancement slow. The system in the past has been too narrow and the remedy for the removal of the "stigma of lunacy" by treating voluntary and detained patients in county and borough asylums, as suggested by the writer of this note, is far from being a hopeful one when we bear in mind that registered mental hospitals and licensed houses have for thirty years been able to do this. No, the remedy lies in a far wider vision, and unless we, as an Association, can show by our policy that we have this, there is little doubt that we shall, and rightly, be superseded by those who have.

I am, Sirs, your obedient servant,

87, Harley Street, W. 1 ;

MAURICE CRAIG.

March 16th, 1921.

[Sir Maurice Craig is correct in his supposition that our Editorial remarks on Clause 10 of the Ministry of Health (Miscellaneous Provisions) Bill are not an official expression of opinion of the Medico-Psychological Association. He need be under no misapprehension regarding the writer he refers to. "Occasional Notes" are Editorial utterances for which the Editors are solely responsible. Neither is any such claim as he mentions made. The Association sent a wire to the Minister of Health definitely stating that it desired the clause to be withdrawn if its amendments were not accepted. The amendments not being found acceptable, it is obvious that the comment in the early part of paragraph 1 was fully justified. The attitude taken up by the Ministry on this subject as regards the mental hospitals and Board of Control is too well known to the Association to need recapitulating here. The Association will be glad to learn that as far as Sir Maurice Craig is concerned he is one with us that "any concession as to early treatment should be enjoyed by all mental hospitals, etc." Such an assurance would have been better timed when the Bill was under consideration by the Association, but it is nevertheless welcome. We venture to think that this is just the soul and centre of the Association claim, neither more nor less. We do not propose to discuss the remaining points of the letter. Members will judge for themselves as to the correctness or propriety of the Journal's remarks on this subject. We will only say that any measure under which there is the chance of excluding the great majority of practising alienists from the treatment of incipient, recent or acute cases, whether certified or not, is of doubtful efficiency, and will react unfavourably on the status of the established mental hospitals and their patients.—Eds.]

OBITUARY.

ANTOINE RITTI.

It was a very little company that on January 25th, 1920, followed to its last resting-place the body of Antoine Ritti, borne, in compliance with his request, upon the pauper's bier. His wishes that no letters of invitation should be sent out and no oration delivered were scrupulously observed, and not till afterwards did a laconic announcement he had himself drawn up appear in an evening paper. It was all very simple and business-like, characteristic of the man and everything he did. So passes from the ranks of medicine a good and faithful servant and from the roll of honorary members of our Association a distinguished name.

Born in 1844, under the shadow of the cathedral of Strasbourg, where his uncle was bishop, and educated at the Catholic Gymnase at Colmar, founded by that same uncle, he was considered by his relatives to have a vocation for the church; but when he was about twenty years old he embraced the positive philosophy of Auguste Comte, and a little later became a student of medicine. Clouds hung over his student days; he was interne at an obscure provincial asylum under fameless chiefs (Fains, 1867-70), his studies were interrupted by the Franco-Prussian war, and he was uprooted from his native Alsace by his choice of French nationality. He entered upon the practice of his profession in 1874 as a medical

officer of the Bureau de Bienfaisance in the VI^e Arrondissement of Paris. How, under such auspices, he early attracted the notice of men like Baillarger and Jules Falret is not now clear; but in 1875 he became an assiduous contributor to the *Annales Médico-psychologiques*, of which Baillarger and Lunier were then the editors. Dr. Georges Vernet, from whose delightful sketch in the *Annales* the materials for this record are drawn, tells us that those were still the happy times when young men, reading much, wrote little, and only when they knew how to hold a pen; yet sometimes an article that made a good impression would stamp an author and decide a selection, and probably it was so in Ritti's case.

In 1878 a crisis occurred in the history of the Maison Nationale, Charenton, This famous institution, from which the discovery of general paralysis had been announced to the world, was in evil plight; the posts formerly occupied there by Esquirol and Bayle, by the Fovilles and the venerable Calmeil, had of late, through jobbery and influence, been given to persons who were utter strangers to mental medicine. An end had to be put to this state of things. A *concours sur titres* was held, with a jury that included several distinguished alienists; and at an election that cannot have been easy, for Bourneville, Doutrevente and Jules Voisin were among the candidates, Christian and Ritti were appointed physicians—Christian for the male side and Ritti for the female. On February 15th, 1879, they entered upon their duties simultaneously. They had a difficult task before them, to restore the prestige and moral authority of the medical staff and to recall to the Maison Nationale the attention of the scientific world. These two men, of widely different types of mind, realised the need for unanimity and concerted action; they sealed a pact which for twenty-six years was by both of them religiously maintained.

The last twenty years of the nineteenth century were marked by important discussions in mental medicine, and the debates in learned societies were often very animated. It was a matter of course that in these debates Charenton must be represented. Christian was its mouthpiece; he had great powers as a speaker. But he owed to Ritti, less gifted in this respect, and always ready to efface himself before his older colleague, great stores of valuable data, much fruit of erudition, and many of the happy phrases that characterised his interventions. His scientific work he mostly handed over to Ritti for publication. Ritti himself wrote many papers. Besides his *Traité clinique de la folie à double forme (folie circulaire délire à formes alternées)*, to which the Academy of Medicine awarded the Falret prize in 1880, there were papers on the relations between general paralysis and syphilis (1879, 1888), many articles in Dechambre's *Dictionary*, and much else. He remained at Charenton for over thirty years. The last months were saddened by incidents he could never afterwards recall without bitterness. Feeling one day that he had not been treated with the respect due to him, he resigned. Prematurely, in full intellectual and physical vigour, he left the Maison Nationale in October, 1909.

Ritti's share in the advancement of our science was not that of a discoverer or explorer; his task, no less important, was to convert into smooth road the rough path that others had found. Much valuable work of this kind he accomplished not only by the writings that have been referred to, but in other ways that have now to be mentioned. In 1881 he was elected general secretary of the Société Médico-psychologique, and he was re-elected annually until his death. President after president, in speaking of the services he thus rendered, exhausted the vocabulary of laudatory epithets; the least that they said of him was that he was the soul of the Société. But to him it never seemed strange that his qualities of regularity, punctuality, and precision should be at its service. He wrote the reports of over five hundred of its meetings, including abstracts of innumerable papers and speeches. In 1885, when Lunier died, he was chosen to be one of the editors of the *Annales Médico-psychologiques*, and in 1890, on the death of Baillarger, he became principal editor, and he remained so for the rest of his life. In the ways in which he exercised both his secretarial and editorial functions he was somewhat old-fashioned. He had a great respect for tradition. His editing was no indiscriminate acceptance of whatever manuscript came to him; he used the blue pencil freely. And in the Société he regularly observed the old-established and decent custom by which, at each April meeting, the secretary would read a biographical notice of any member deceased in the preceding year. These *éloges*, and others that he delivered at the unveiling of the statue of Pinel, the busts of

Baillarger and J. P. Falret, and the busts of Pinel and Esquirol at Toulouse, are written in impeccable French and breathe a severely classic spirit.

He was the recipient of many marks of distinction, including the Legion of Honour, the presidency of the Congress of French-speaking Alienists and Neurologists, the presidency of the Clinical Society of Mental Medicine, and the presidency of the Mutual Association of French Alienists.

He died, after a brief illness, at the villa at Auteuil, to which, on leaving the Maison Nationale, he had retired, where neither Gothas nor Berthas had ever succeeded in driving him from among his books. He bequeathed 20,000 francs to the Mutual Association of French Alienists, and the residue of his fortune to the Academy of Medicine and other learned bodies for the founding of prizes in mental medicine.

Peculiarly appropriate to Ritti himself are the noble words in his *éloge* of Calmeil: "Ennemi du faste et du bruit, Calmeil nous lègue à tous l'exemple de ce que peuvent, pour le progrès des connaissances et même pour le bonheur individuel, le goût de la retraite, la passion du savoir et l'amour de la vérité. Puisse ce modèle si achevé du médecin aliéniste modeste, consciencieux, esclave du devoir, trouver de nombreux imitateurs, au grand profit de la science et de l'humanité."

SYDNEY J. COLE.

DAVID YELLOWLEES, M.D.Edin., LL.D.Glasg.

THE recent decease, full of years and honours, of Dr. David Yellowlees removes from our midst one of the few remaining pioneers of the renaissance which occurred in British psychiatry during the later decades of the nineteenth century.

Reference was made to his personality and career by the President, Dr. W. F. Menzies, at the Quarterly Meeting of the Association in February, and also by Dr. R. B. Campbell at the March meeting of the Scottish Division. We hope to publish an extended biography in a future number of the Journal.

The *Lancet* in its obituary notice (February 5th, 1921) says:

"With the death of Dr. Yellowlees at Edinburgh, on January 19th, in his eighty-fifth year, has passed away a man who combined high professional attainment in mental medicine with a gift for administration. David Yellowlees was born and brought up at Stirling, graduated at Edinburgh in 1857, and after a period of study abroad returned as assistant to Sir William Gairdner at the Edinburgh Royal Infirmary. His first appointment in psychiatry was to assist Dr. Skae at the Edinburgh Royal Asylum, Morningside, and in 1863 he went to direct the Glamorgan County Asylum, where he remained twelve years. In 1874 he followed Dr. Mackintosh as Physician-Superintendent to the Royal Glasgow Asylum, Gartnavel, a post which failing eyesight obliged him to relinquish in 1901. During the greater part of this time he lectured on insanity in the University of Glasgow, which conferred upon him the honorary degree of LL.D. in 1888. He presided over the Psychological Section of the British Medical Association which met at Glasgow in 1885, over the Medical-Psychological Association in 1890, and over the Faculty of Physicians and Surgeons of Glasgow in 1892-94.

"Under Yellowlees Gartnavel became a keen centre of psychiatric thought. His physical energy and enthusiasm, combined with a radiant optimism, infected his assistants, as well as in some measure the patients and their friends. His routine was to entrust each of his helpers with the entire responsibility of a part of the asylum, and to hear and discuss their reports at his own house every day at noon. He then visited the wards independently, acting as a kindly and sagacious consultant. Simple and frank himself, he expected, and generally found, the same qualities in others, who grew to rely upon his honest and fearless character.

"Dr. Yellowlees took a leading part in the philanthropic work of the city which became his second home. He was for the greater part of his active life on the directing board of the Association for the Relief of Incurables, the Bramhill Home for Incurables, and the Lanfine Home for Consumptives. He helped to found the Glasgow Association for the Care of Defective and Feeble-minded Children, and

EXAMINATION FOR THE NURSING CERTIFICATE, NOVEMBER, 1920.

Preliminary Examination.

1. What bones go to make up the skull?
2. (a) Name the different parts which make up the digestive canal.
(b) What two digestive juices are poured into the duodenum? What organs secrete them?
3. What are the commonest narcotic poisons? Describe the symptoms and treatment which you would adopt in a case of a patient who had taken opium.
4. Trace the course of the circulating blood in its passage from the right ventricle to the left ventricle.
5. How would you act in the following emergencies?
(a) When a patient faints.
(b) When a patient's clothes catch fire.
(c) When a patient has an epileptic fit while eating.
6. (a) What is a secretion? (b) What is an excretion? Describe the various methods of getting rid of waste materials.
7. Mention the varieties of hæmorrhage. State in detail how you would attempt to deal with bleeding from an artery.
8. Name and state the position of the various ductless glands. What diseases are due to disease of the thyroid gland?

Final Examination.

1. What is meant by "dementia"? Describe a case of "senile dementia" and one of "dementia præcox" (premature dementia). What are the nursing precautions in a case of senile dementia?
2. What are the causes of internal hæmorrhage? How do you distinguish between hæmorrhage from the lungs and hæmorrhage from the stomach? What are the nurse's duties in each case before the arrival of the doctor?
3. What classes of patients are likely to show homicidal impulses? What precautions would you take with dangerous patients to prevent assaults?
4. Name the twelve most important daily duties of a Charge Nurse of a large ward containing patients with varying types of insanity.
5. Mention the principal parts into which the brain is divided and briefly give the functions of each part.
6. What are the points requiring attention in nursing a case of heart disease? State the most obvious symptoms.
7. State how you would disinfect a room after a case of infectious disease had been in it.
8. What are the disorders of sensation most common among the insane, and what are the dangers consequent thereon?

PRELIMINARY EXAMINATION, NOVEMBER, 1920.

List of Successful Candidates.

Cambridge.—Ellen B. Abraham, Florence A. Canham, Mabel Hudson, Harriett Anne Martin, Gertrude Mary Pipe, Nora Wilce, Edward Baker, Arthur John Case, Robert George Collis, Charles Crack, William E. Dean, William A. Dykes, Harry James Lewis, Horace S. Ling, Ernest E. Mason, Henry J. Webb.

Chester, Macclesfield.—Lily Jane Clarke, Mary D'Arcy, Harry Baron, William B. Buxton, Walter Crossley, Harold E. Fairhall, Thomas Hobson.

Cornwall.—Cicely May Bickel, Winnifred M. Keat, George Ward.

Derby (County).—Doris May Greaves, Alice E. R. L. Hearne, Margaret Hudson, Doris E. Jordan, Percy Padmore.

Dorset.—Rosa W. Day, Hylda M. Hanson, Alice Munden, Sybil Margaret Scullion, Alice Rose Smith, Constance Smith, Elsie A. Taylor, Reg. G. Bleatham, Charles V. Chubb, Thomas J. Chubb, Harry Dunn, E. E. Guy, Frederick G. Guy, Norris Honeybun, Gerald T. Hooper, Percy F. Rockett, Edward John Trim, William H. H. Webb, Frank Woodland.

Durham.—Sarah E. Howe, James Bowen, George Dixon, William S. Fairfoul, William M. Forster, William Fryer, Fred Harland, Hugh McCrickard, Frank Padley, Herbert Edward Pyett, Thomas Quinn.

Herts.—Ada Mynott, Lilian Mary Oulds, Joshua John Camp, Frederick William Jillings, Albert Ed. Looker, Frederick J. Taylor, Herbert Way.

Kent, Barming Heath.—Emily M. Birchall, Carrie F. Mitten, Hilda Rennels, Elsie Robinson, Elizabeth Sammon, Margaret E. Sweeney, May Sweeney, Elizabeth H. Tinto, Ida E. Tyson, Walter John Baker, William G. Bishop, William Howard, John W. Mitchell, Bartholomew H. Mullins, Albert Ed. Oliver, William C. Reeve, Thomas Thompson, John Winter.

Kent, Chartham.—Marjory Croft, Annie Edge, Daisy Ethel King, Florence Lydia Webb, Alfred Cogger, Harold L. Davison, Alfred D. C. Reardon.

Leicester (County).—Norella Morahan, Mollie Ward, Jesse Balderston, Robert W. Copley, Herbert Griffiths, Charles Pinfield, Alfred Skinner.

Lancaster, Rainhill.—Minnie A. Brazier, Elvis Collins, Alice G. Duffy, Elsie F. Duffy, Laura C. Mogerley, Elizabeth Scott, Ivy Daisy Williams, James Bridge, George Bright, Percival Fisher, Richard William Hughes, Frederick Kenyon, James Lynas, George F. Page, Harry Ridgway, Ernest Wright.

Lancaster, Whittingham.—Blodwen Hughes, Margaret W. Lee, Mary Macintosh, Jane Marsden, Lilian E. Milton, Frances Nelson, Alice I. Smith, John W. Barker, Hudson Birkitt, Arthur Bracewell, Harry Cookson, John Dixon, John A. Dumbleton, Robert Fairclough, James Robinson Gates, Reuben Harrison, Thomas Helm, Cornelius McDowell, Charles McGuinness, Edmund O'Brien, Thomas O'Brien, George Redfern, John A. Storey, Frank Claude Turner.

London, Banstead.—Rhoda K. Burns, Florence F. Cheeseman, Ellen Connell, May Cleasby, Catherine Creagh, Lucy R. Cutter, Sadie M. Docherty, Mary Durkan, Elizabeth Evans, Margaret Ewan, Amy F. Flint, Winifred May Fox, Mary G. Glenane, Margaret Kate Graves, Edith Eliza Higgs, Dorothy C. Hobbs, Annie F. D. Kadwell, Louisa Lambert, Antoinette Power, Maggie Stimson, Gertrude A. Thrupp, Lily Wilkinson, Ethel B. Withey, William Asby, William Stanley Boreham, Alfred G. Carew, William Ed. Collyer, Herbert G. Dubery, Edward Ford, George Fuller, George Fuller, William E. Garland, Robert H. K. Gibson, Albert George Hall, William Frank Jones, John P. King, William H. Kingsbury, John McAndrew, Charles H. Martin, Thomas Peasley, Arthur R. Retter, Stanley J. Shaw, Robert Shepherd, William M. Smith, John Stones, Albert J. Sugars, Charles H. W. Vine, Henry H. Winkworth, Sidney H. Wynn.

London, Bexley.—Vera E. Benham, Lily Burrows, Avis Fairhall, Rachel Griffiths, Dorothy E. Halsey, Emma Lilian Hitches, Janet B. Hogg, Jane M. Hutchinson, Agnes W. Kinnersley, Mary K. Logue, Olive L. Staines, Elizabeth M. Sutton, Amy W. Tanner, Harriet Thompson, Martha Turner, William C. Ashby, Walter V. Beckenham, Arthur B. Belcher, Richard W. Bloomfield, Charles A. Boswell, William J. E. Coppard, Alfred E. Cox, Charles A. Dangerfield, David Darvell, Bertram S. Fairhall, Patrick Fitzgerald, Thomas William Gosling, James Green, Robert B. Griffin, Sylvester Hall, Walter Haygreen, Lewis Holmes, Henry John Hudspeth, Edgar G. Huggett, William Jennings, Frederick Jones, Thomas J. Jones, Frederick Lynes, Reginald J. Marley, John Arthur Morrin, Francis G. O'Sullivan, William J. Pidduck, William V. Poole, Arthur William Reast, James A. M. Reid, William Roberts, Henry R. Slater, Richard L. Thomas, Frank H. Turner, Ernest G. Usher, Thomas S. Winchcombe, Francis W. Witts, James B. Woodgate.

London, Claybury.—Katherine L. Bradley, Elice L. Brooks, Evelyn Burdikin, Julia Dalton, Stasia Dalton, Hilda E. Harris, Margaret P. Isard, Sarah Jane McMillan, Kate Moran, Celia M. O'Boyle, Kathleen O'Regan, Bertram Allam, Alfred W. Ashwin, John Blair, Arthur T. Brooks, William A. Brown, Alfred H. Clements, Arthur S. Covey, Arthur H. Edwards, John G. Gibbs, John W. Hayter, Leslie Hickman, William Edward Hovell, George Meredith, J. S. Reynolds, Daniel Rourke, Benjamin H. D. Rutledge, Fred Smith, Arthur J. Toseland, Alfred S. Wakeling, Robert John Warbey, Alfred F. Webb, William F. Wellham, Alfred Henry Williams.

London, Colney Hatch.—Hilda W. Batt, Emily Bevan, Amelia Cook, Sarah J. Davies, Mary Ferguson, Brigid V. Hanratty, Grace Jones, Sarah Kelly, Kate Kilkelly, Lily M. Martin, Emma E. Maynard, Annie Miles, Elizabeth Thomas, Charles H. Ailward, Walter Chidgey, James S. H. Cook, Henry Crew, Thomas Dallow, Henry William E. Finch, Thomas J. Garland, Alford G. Hind,

Horace F. Holding, Arthur H. Hutchings, Daniel Keenan, William Oswald, Joseph Henry Smith, Walter F. Wakenell.

London, Hanwell.—May Lilian Atkins, Emily L. Blunt, Maud Ivy Boyton, Doris M. Castle, Edith M. Church, Jessie M. Church, Alice M. Cornwall, Annie E. Cox, Maud Cummings, Edith M. Edgley, Ada Ethel Edwards, Violet M. Emberry, Jessie C. Fowler, Mary Hart, Daisy Hutchinson, Rosie A. Jennings, Emma May Lole, Isabella McGill, Elsie T. Mason, Catherine H. Mathieson, Mildred E. May, Winifred Milson, Jane A. Parkes, Edith A. Passmore, Elsie Rose Pinnegar, Ruby K. Pinnegar, Mary Quirk, Beatrice Mary Raymond, Grace M. Scetrini, Ada V. Wilkinson, Gladys T. Williams, Sidney Andrews, Edgar Bartlett, William H. Blomberg, William Frederick Burge, Frank L. Burls, Edward Burridge, Charles, A. Calcutt, Harry Church, Timothy J. Clements, Francis Coles, Frederick G. Cox, Leonard W. Darbin, Herbert H. Deering, George Frederick Denison, Edward R. Douglas, Henry C. Dunstone, Frank Eldridge, Harry Eldridge, Walter E. England, Charles H. Evans, Charles F. Farrance, Henry George Ferris, Archibald R. Fish, Wilfred Fitzgibbon, Arthur L. Grening, Frederick J. Halinson, Arthur Hibbert, Sidney P. Holbrook, Walter William Johnson, George H. Jones, Bertram R. A. Kyte, Walter V. Lawrence, Douglas E. Lucas, Arthur L. Mitchell, Charles J. Munro, Alfred E. Partridge, Herbert J. Partridge, William A. Pitcher, William G. Rogers, Frank Scott, Albert R. Shaw, Harry Skingle, Harry T. Wain, Frederick H. Ware, Charles R. West, William Wheeler, Albert White, William Yeo.

London, Horton.—Annie Cann, Mary E. Kennedy, Emily E. Moore, Charles Bulley, Thomas E. Cheek, John Edward Duncan, George F. Edwards, Thomas Gale, Edward Harfitt, George Harrison, Arthur William Hodge, Alfred W. Mills, William T. Pottle, Alfred Richardson, Albert W. Spong, Victor L. C. Spong.

London, Long Grove.—Edith M. Almond, Eleanor M. Almond, Mary Aspell, Eva C. Bell, Lily A. Clark, Marion Daniels, Constance M. Edgar, Elsie M. Ellis, Ida Violet Gough, Edith C. Holmes, Lily K. Mills, Harriet L. Shingler, Elfreda M. Wright, Frank James Alder, Walter S. Belchamber, Frederick Brook, Arthur Brown, Alfred R. Burdett, Robert J. Catlin, William F. Church, William Coe, Joseph J. Deal, Frederick Edgar, George A. Garrod, Alfred J. Harding, Henry F. Harris, Leopold J. Hatcher, Albert G. Heasman, Reginald Hibbert, Alfred Hockey, Albert E. Hopkins, Percy E. Hutchings, Albert E. King, Charles W. Lammas, Frederick Luxford, Bertie T. Macrow, Frederick J. Mileham, Arthur Moore, Edward C. Phyll, Frederick W. Ring, Herbert W. Rounce, William Routledge, Bertram C. Ruddell, William J. Saitch, Thomas K. Skilton, William P. Spooner, George D. Steele, Albert G. Thorpe, Edwin Tucker, Sidney B. Tugwell, Percy Twaits.

London, Ewell.—Florence E. Whipp.

Middlesex, Napsbury.—Dorothy M. Bilham, William F. Farmer, Charles W. Schoop, Henry G. Shadbolt, Charles W. Wells.

Monmouth.—Albert E. Eveness, William M. Jones, John George Pritchard, William Roberts, Charles Wood.

Norfolk.—Maud A. Burrage, Emily Annie Housley, Georgina M. Lyon, Alice E. Rimmer, Ella M. Wilby, Frederick Blythe, Victor A. Boyce, Alfred Curzon, Francis V. Doggett, Percy G. Elliott, William H. Gray, Ernest G. Houghton, John William Whittaker.

Northampton.—Arthur H. Frear.

Northumberland.—Margaret Maughan, Rachel Robson.

Notts.—William H. Buxton, Claude Hollingworth, Arthur Holmes, Arthur L. Taylor.

Stafford, Burntwood.—Henry Gardner.

Stafford.—Sidney H. Adamson, Edward J. Berry, William Ilsley, John S. Rees, Henry Wilde, Edward T. Wood.

Stafford, Cheddleton.—Ernest C. Brown, Horace E. Clarke, William H. Clifford, Frederick W. Crossland, John M. Davie, William S. Eardley, Alfred L. Eason, John D. Hart, Harry B. Horlock, Albert E. Hurst.

Somerset, Cotford.—Daisy F. Mayers, Hugh F. Badcock, Cyril R. Criddle.

Suffolk.—Janet A. Pinner, Charles E. T. Clarkson, William R. Cross, Frederick John Dunnett, Thomas Freer, Charles F. Knights, Frederick C. Reach, Charles Sutcliffe.

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* Passed with distinction.

NOTICES OF MEETINGS.

- Annual General Meeting*.—(Provisional) July 13th, 1921, London.
Quarterly Meetings.—May 26th, 1921.
South-Eastern Division.—May 4th, 1921, Ministry of Pensions Special Hospital, Tooting.
South-Western Division.—April 22nd, 1921, Ashurst Hospital, Littlemore, near Oxford.
Northern and Midland Division.—April 21st, 1921, Gateshead Mental Hospital, Stannington.

NOTICE TO CONTRIBUTORS.

N.B.—The Editors will be glad to receive contributions of interest, clinical records, etc., from members (whether these have been read at meetings or not) for publication in the Journal. They will also feel obliged if contributors will send in their papers at as early a date as possible in each quarter.

Writers are reminded that, according to LIX(a) of the Articles of Association, "all papers read at the Annual, General, or Divisional Meetings of the Association shall be the property of the Association, unless the author shall have previously obtained the written consent of the Editors to the contrary."

Papers read at Association Meetings should not, therefore, be published in other Journals without such sanction having been previously granted.

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VOL. LXVII.

Part I.—Original Articles.

The Psychopathology of Puberty and Adolescence. By Sir FREDERICK MOTT, K.B.E., M.D., F.R.S., LL.D. Edin., being the Morison Lectures, 1921, delivered within the Hall of the Royal College of Physicians, Edinburgh.

LECTURE I.—*March 7th, 1921.*

MR. PRESIDENT AND FELLOWS OF THE COLLEGE,—Permit me first to thank you for the great honour you have done me by inviting me again to deliver the Morison Lectures in this great seat of medical progress and learning.

The subject I have chosen is one that a previous lecturer illuminated ; needless to say, I refer to the late Sir Thomas Clouston, one of the great pioneers in psychiatry, who, by his clinical investigations, writings and teaching, did so much to spread light upon the causes, symptomatology and treatment of mental disease. In 1890 he delivered the Morison Lectures on "The Neuroses of Development." As he said, one of the objects of his lectures was "to show that the most serious of all the pathological facts of brain development are certain mental disturbances in the function of the brain, and that these are associated hereditarily and functionally with, and take their character from, the function of reproduction, which during adolescence is attaining its full strength." Our knowledge of the functions of the reproductive endocrine system was only in its infancy, but his practical mind regarding the relation of the physiology and pathology of reproduction to neuroses and psychoses is clearly shown throughout these lectures. Since then Edinburgh, by the investigations of its illustrious professor of physiology, Sir Edward Sharper Schafer and his pupils, have laid the foundation of endocrinology—a subject that has revolutionised our ideas of medicine, and

which promises to illuminate the darkness of many diseases, including those of the mind. Again, I must not omit to mention the important pioneer clinical observations of Dr. Byrom Bramwell upon diseases having their origin in morbid conditions of the endocrine organs.

Every physician knows that there are two critical periods of life when insanity is especially likely to occur, *viz.*, the adolescent and the involutional—the periods when the sex instinct matures and wanes. Consequently there is *à priori* evidence suggestive of a correlation of the true psychoses with disorders of the sexual functions. The primal animal instincts of self-preservation, reproduction and the herd instinct are fundamental to all the mental and bodily activities of human beings. But Nature is unmindful of the individual, mindful only of the species, and Nature has ordained that the sexual impulse, during the reproductive period of life, should be the strongest of all physiological impulses, and the great source, but not the whole source, of psychic energy as Freud and his pupils maintained, for the war has conclusively shown that the instincts of self-preservation and the herd instinct are also great sources of psychic energy.

Feeling convinced that certain forms of mental disease were correlated with morbid changes in the reproductive organs, I determined to examine a series in the two sexes, but before any conclusions could be drawn, it was necessary to become familiar with the normal conditions of the human testis and ovary, at various ages from birth onwards, of individuals dying from various injuries or diseases, and then compare the same with those obtained from patients dying in the asylums.

The examination of the ovaries is much more difficult than the testes, for in order to see if there are ripening Graafian follicles they have to be cut in series. Dr. Laura Foster did this in 100 cases. Unfortunately she died abroad, and I published in vol. vii, *Archives of Neurology and Psychiatry*, her brief report with some additional remarks. I have since devoted a considerable time to a re-examination of her large collection of specimens. Also in conjunction with Dr. Hayao further specimens from fresh cases have been made and carefully examined. I will not take up your time with the details of methods, an account of which has already been published; I will only deal with such facts and principles as are involved in the discussion of the psychopathology of adolescence.

STRUCTURE IN RELATION TO FUNCTION OF THE REPRODUCTIVE ORGANS OF THE TWO SEXES.

Testes at birth.—The interstitial cells of Leydig are of mesodermic origin; they appear in foetal life, and exist before the sperm-cells have acquired their cytological characters. It is probable that they act as a ductless gland which plays a part in determining the male sex

characters in the indifferent germ plasm, in the normal development and maturing of the sex gland, in the formation of the accessory apparatus of the male genitals, and in the maintenance of those morphological and biological characters peculiar to the male sex. In support of these premises it may be mentioned that cryptorchids, in which the cells of Leydig are present but no spermatogenesis occurs, have sexual desire. Ligation of the vas deferens and X-ray treatment lead to destruction of the sperm-cells, but leave the interstitial cells and Sertoli cells uninjured, and the sexual desire persists. Cases of alveolar sarcoma of the interstitial substance have been recorded in which there was an extraordinary sexual precocity, which disappeared upon removal of the testes.

Structure of testis of newborn child.—Examination of the testis of a newborn infant shows the spermatic tubules, consisting of a delicate basement membrane containing closely-packed embryonic cells consisting of a nucleus with nuclear network surrounded by cytoplasm. The interstitial substance consists of loosely-packed connective tissue, blood-vessels and lymphatics, in which are groups of large polyzonal cells of Leydig, with a large round nucleus staining well with the basic dye. The surrounding cytoplasm stains pink with eosin and shows a number of minute vacuoles. These vacuoles contained lipoid granules, eosinophile, basophile and pigment (lutein) granules.

It is probable that during the period shortly following birth till puberty the interstitial cells of the infant are no longer active; their internal secretion has already performed its office of impressing upon the body the male characters and the special instincts and affective characters of the male sex. I will throw on the screen photo-micrographs of sections of the testes of males dying at various ages between birth and puberty.

The testis after birth till puberty.—At four months the interstitial cells are no longer seen. The seminiferous tubes have developed considerably by a proliferation of the embryonic cells, so that they appear nearly double the size of the tubes at birth. A few fine orange lipoid granules can be discovered in the seminiferous tubes and abundant scarlet-stained granules in the interstitial tissue. Only a few interstitial cells are now seen; they are smaller than in the testis of the infant at birth. The appearance of lipoid granules in the seminiferous tubes and in the interstitial tissue may be explained by supposing that it has been and is still utilised by the embryonic sperm-cells in their formative activity and proliferation; the interstitial cells will soon pass into the resting stage, in which they will remain till the beginning of puberty.

The testes of a boy, *æt.* 9, who died of shock from injury, exhibited similar microscopic appearances to the following, obtained from a boy, *æt.* 11, though less advanced.

The basement membrane of the tubules is more distinctly seen; the tubes are larger than those of the infant of four months, they are close together, and there are observable evidences of formative activity; the syncytial cells of Sertoli can here and there be differentiated, but they contain only few lipoid granules. The spermatogonia here and there have nuclei showing active mitosis. There is no interstitial lipoid observable, and the interstitial cells are still practically in the resting stage. It appears, therefore, that in the prepubertal stage of life the whole of the psychic and productive energy is absorbed in the normal individual, living under physiological conditions in building up a suitable body for preservation of the species by reproduction.

The ovary at birth.—In the female organ of reproduction we see a different order of things. A section of the ovary of a newborn child shows an immense number of primordial follicles lying in the exterior part of the stroma of the gland. It is calculated that there may be as many as 400,000. It may be presumed that each follicle with its contained ovum has a specific energy of its own; now only a few relatively of these mature, and it may be assumed that those will mature which are endowed with the greatest specific energy, so that on this hypothesis there is a struggle for existence—a survival of the fittest—by which those with a weak vital energy are eliminated. For if one ovum escapes at each menstrual period it may be calculated that not more than 400 ova can fulfil their mission of escape from a ripe follicle, surrounded by syncytial nurse-cells derived from the discus proligerus. The female germ-cell is then taken to the uterus there to await passively the active male germ.

The Graafian follicle and maturation.—But whereas there is no prepubertal attempt at maturation of the male germ-cell, it is otherwise in the female, for sections of the ovary of a normal infant soon after birth may show complete Graafian follicles with liquor folliculi, zona granulosa and discus proligerus containing an ovum with zona pellucida. Surrounding the follicle may be seen the theca interna, and outside this the stroma with an increased vascularity.

We cannot in the human ovary discover cells corresponding to the interstitial cells of Leydig of the male and the cells of the theca interna and the epithelial cells within the follicle are considered by most authorities to be the source of an internal secretion in the human being.

Now these follicles which continue to mature during the whole prepubertal life of the normal healthy female do not proceed to dehiscence till menstruation occurs, but form atretic follicles, and these subsequently form small white corpora atretica. Why should these follicles undergo maturation, and what useful purpose could they serve seeing that the male reproductive organ remains at rest during the

prepubertal period? There is reason to think that both male and female characters are present in all the cells of the body, but the male characters are dominant. It is probable, therefore, that an internal secretion from the ripening follicles may impress and cause to persist the female characters of mind and body. Some recent experiments support this inference; for if the ovaries be removed from young hens they develop characters and behaviour which make it difficult to distinguish them from cockerels.

THE SEXUAL ORGANS AND VITAL ENERGY.

There is an intimate relation between the development of the sexual organs prior to puberty and the vital energy and resistance to disease. Kyrle's observations on a large number of cases show that a large number of children are born with undeveloped reproductive organs. Individuals with undeveloped reproductive organs have less vital resistance to disease than those with normal reproductive organs. Among the number dying with undeveloped seminiferous tubes far the greater number were physically undeveloped. The greater number of those dying in early life had undeveloped testes. I have found the same condition in the cases I have examined. But when I come to compare inborn germinal and acquired mental disease we shall see the same facts illustrated.

"It is characteristic of every living organism to build itself up according to a certain inherited type or pattern, so that we must attribute to its germ a formative capacity in virtue of which it turns to account both the food and the force which it derives from without." The capacity of the spermatogenic epithelial cells of the seminiferous tubules to form these dynamic vital units, the spermatozoa, in unlimited numbers for more than three-quarters the time of a man's life, illustrates remarkably well this power of the germ-cell to build itself up to a certain inherited type by a formative capacity, in virtue of which it is able to endow each spermatozoon with the formative capacity of building up the bodily and mental characters peculiar to species, race and individual ancestors.

SPERMATOGENESIS.

At puberty this active formative process of spermatogenesis commences, and examination of the testis shows the seminiferous tubes increased in size and closely packed together and the interstitial cells of Leydig are seen. Each tube shows a basement-membrane, within which and lying in it are the spermatogonia and the syncytial cells of Sertoli; these two cells have independent functions. From the former by active nuclear proliferation are formed the spermatoocytes, from the

spermatocytes by hetero-typical nuclear division the spermatids—little masses of nuclear matter with half the number of chromosomes of the spermatocyte; there is thus preparation for conjugation with half the number of chromosomes (or nuclear matter) of the ovum. But this little particle of living matter endowed with such great potentialities is only in its infancy; it has, like the infant, to grow and acquire means of active locomotion, and the Sertoli syncytial cells filled with lipoid cholesterol ester granules nurse and feed the spermatids until they develop into free-swimming independent organisms.

Comparative examination of the seminal fluid in the vesiculæ seminales of a healthy boy, æt. 15, who died twenty-four hours after a motor accident, with the seminal fluid of a man, æt. 24, who died from injury the same day, showed that the spermatozoa were not so large and well developed in the former as in the latter. Moreover, examination of the testes of the two cases showed a greater abundance of lipoid granules in the syncytial cells in the adult of 24 than the boy of 15. It has been calculated that as many as 270,000,000 spermatozoa may be discharged at coitus, and it may be asked whence comes the material out of which all the highly phosphorised nuclear matter is formed. I have brought forward evidence to show that the lipoid granules seen in the interstitial tissue and in the cells of the tubules, especially the Sertoli cells, constitute the raw material from which the nucleic acid necessary for active nuclear proliferation and spermatogenesis is formed. These lipoid granules give the oxidase reaction owing to the presence on their surface of traces of unsaturated fatty acids. Decomposition and recomposition processes are brought about by the catalytic action of the P and Fe of the cell nucleus upon the oxidase causing molecular oxygen, O_2 , to be converted into atomic oxygen, O—O, on the surface of the granules. I shall later on indicate the source of this phosphorised lipoid cholesterol ester. The experiments of Miescher and Kossel on the milt of Rhine salmon and other fish have shown that the heads of the spermatozoa consist of nucleic acid combined with a specific protamin. The tails consist of a lecithin cholesterol ester. Whence comes this phosphorised lipoid cholesterol ester?

THE BIO-CHEMICAL INTER-RELATION OF THE SEXUAL GLANDS AND THE DUCTLESS GLANDS.

We know that the interstitial gland can function independently of the genetic gland structure, and there is abundant proof to show that functionally correlated with the sexual glands are the thyroid, the parathyroid, the pituitary gland, the pineal gland, the adrenal, the islands of Langerhans of the pancreas; in fact, as Dr. Blair Bell, in his

very interesting work on the sex complex, maintains, the sex-glands enter into the hormonopoietic system, and, as Noel Paton asserts, act as a regulator and controller of that system. Abnormal conditions of the sex-glands may therefore disturb the whole hormonopoietic system, and dislocate the normal bio-chemical equilibrium necessary for their harmonious inter-relation that is essential for metabolism and the well-being of the body and mind.

THYROID AND REPRODUCTION.

There are many facts pointing to the bio-chemical inter-relation of the sexual glands and the ductless glands ; thus it is known that the thyroids increase in size during pregnancy ; there is indeed a distinct hypertrophy occasioned by a marked increase of colloid in the follicles. The development of the corpus luteum and the passage of its hormone into the blood may be the cause of this hypertrophy. An increase of the thyroid occurs at puberty, during menstruation and at the climacterium.

HYPOTHYROIDISM, PITUITARY HYPERTROPHY AND NEURONIC CHROMATOLYSIS.

I have examined the central nervous system in seven cases of hypothyroidism occurring in women at the climacteric period and found a marked decrease in the basophil chromatin substance of the central nervous system, the energy substance or kinetoplasm, and the association of the same in three cases with an acute manic-depressive psychosis. In two of these cases the ovaries showed an early active involution process with large numbers of recent atretic follicles. The pars intermedia of the pituitary was greatly increased, and throughout the pars nervosa were cells undergoing a colloidal transformation. What influence this increase of pituitary colloid may have on the central nervous system we do not know, but these cases show that an acute psychosis may occur in women, and that ovarian, thyroid and pituitary changes co-exist and may be causal in their symptomatic effects. Changes also occur in the parathyroids during pregnancy.

PITUITARY AND REPRODUCTION.

In the anterior portion of the pituitary, certain cells which normally exist in the gland are greatly increased in numbers and size and constitute the so-called pregnancy cells, which structural increase is partly the cause of the increase of weight of the gland in pregnancy. Dystrophia adiposo-genitalis or Frohlich's disease is associated with infantile genitalia and hypopituitarism.

CORTEX ADRENALIS AND THE REPRODUCTIVE FUNCTION.

There is evidence to show that one of the functions of the adrenal cortex, the cells of which are filled with a lipoid cholesterin ester, is to provide a substance for the building up of the myelin, but the following facts show that it has another very important function in connection with reproduction. The suprarenal body is developed early in embryonic life and is larger than the kidneys. The cortex adrenalis in the teleostean and elasmobranch fishes is a separate gland. The medullary portion with its chromaffin substance is a part of the sympathetic system, and may be regarded as a reserve store of energising adrenalin to be used when emergencies require it. The cortex adrenalis is developed close to, or forms part of the genital ridge, and in one of my cases of dementia præcox, where the testicle was absent on one side, the adrenal gland on that side was half the size of the other.

Cases of adenoma of the suprarenal cortex have been reported in which there was marked sexual precocity. In four male cases and two female cases of well-marked dementia præcox with regressive atrophy of the testis the adrenal cortex was narrower than normal and contained much less lipid than normal.

Rats fed upon suprarenal gland showed hypertrophy of the testes; other organs did not show hypertrophy. Besides, therefore, serving as a store of phosphorised lipoid for laying down the myelin of the nervous system in the infant, it serves during the whole life of the individual as a store of lipoid supply to the reproductive organs, where it is taken by the blood to serve as the raw material necessary for formative nuclear activity.

Moreover it serves as the raw material from which the osmotic membranes of cells are formed, including the red blood-corpuscles, and it probably is a source of the antitoxins.

There is therefore abundant evidence to show the intimate interrelation of the reproductive organs, the thyroids, adrenals and the pituitary body. But the life of internal relation connected with the organic needs required for the preservation of the individual and the species, ultimately depends upon the sensori-motor activities of the life of external relation controlled by the brain, by which food and force are introduced into the body and transformed and utilised for the special purposes required.

THE INTERRELATION OF THE BRAIN AND REPRODUCTIVE ORGANS.

The harmonious interrelation of the brain and the reproductive endocrine system is effected by the autonomic vegetative nervous system, and this leads me to say a few words upon the interrelations of emotions and the reproductive functions.

The autonomic or vegetative system consists of three divisions: the cranial, sympathetic and sacral. When the neurones of the mid-division meet the neurones of either of the end divisions in any organ the influence of the two sets is antagonistic. Cannon has shown that all the bodily changes which occur in intense emotional states, such as fear and anger, occur as results of activity in the sympathetic division, and are in the highest degree serviceable in a struggle for existence likely to occur when these emotions are aroused. From this point of view emotional perturbations, which seize and dominate the organs and tissues, are expressive of an involuntary mobilisation of energy for making effective bodily reactions of the greatest importance for the preservation of life at times of critical emergency. During peaceful states of mind the cranial autonomic system controls the sympathetic by inhibitory influence. There is, therefore, a natural antagonism between the anabolic influence of the cranio-sacral (para-sympathetic) and the katabolic processes of the sympathetic—an antagonism correlated in the central innervations. Thus, when the mind or body is subjected to, or faced by noci-ceptor stimuli, giving rise to mental or physical pain, there is a diffuse automatic discharge of energy along the sympathetic division to effect self-preservation. Noci-ceptor stimuli and associations are stronger than bene-ceptor stimuli and associations in their influence upon the autonomic system; for emotional states caused by physical and mental pain antagonise and destroy pleasurable desires and their gratification, such as the relish and enjoyment of food and of sexual intercourse. Indeed, self-preservation against injury or the preservation of the *amour propre* in a civilised community may be strong enough to dominate the field of consciousness. This was strikingly seen in the anxiety neuroses of officers during the war.

ANTAGONISM BETWEEN THE SYMPATHETIC AND THE SACRAL DIVISIONS OF THE AUTONOMIC SYSTEM.

Sexual excitement by thoughts or attractions of the opposite sex is consciously, but involuntarily, associated with an outflow of energy along the *nervi erigentes* of the sacral autonomic system; if there is an antagonism in the corresponding sympathetic division, such as occurs in fear or anxiety, erection cannot take place. Indeed, as Morton Prince has stated, the suppression of the sexual instinct by conflict is one of the most notorious experiences of this kind of everyday life. This instinct cannot be excited during an attack of fear or anger, and even during moments of its excitation, if there is an invasion of another strong emotion, the sexual instinct is at once suppressed. Under these conditions, as with other instincts, even habitual excitants can no longer initiate the instinctive process. The mental conflict which

occasions continuous contemplative fear and anxiety represses the sexual desire; this, however, is not a discovery by the new psychologists, nor is the influence of dreams in revealing a mental conflict; it is admirably told by Shakespeare in Lady Percy's speech to Hotspur.

But reproduction in the male is normally associated in nature with combat and pugnacity, and when tumescence occurs, excitement reaches its acme, and there is a diffuse discharge of energy along the sympathetic system, and a great liberation of muscular energy, rise of blood-pressure, accompanied by intense pleasure often mingled with a feeling of anger; the sympathetic discharge in the sacral region at the completion of the act of coitus overwhelms the sacral autonomic innervation, causing contraction of the seminal vesicles and the prostate with discharge of semen and detumescence.

THE SEXUAL INSTINCT AND REPRODUCTION IN RELATION TO PSYCHIC ENERGY AND INTEGRATION IN THE ADOLESCENT OF THE TWO SEXES.

Every fertilised ovum is potentially bisexual, possessing, however, a latent predominating tendency towards masculinity or femininity which decides the nature of the sex. There are many morphological evidences of this bisexuality in every individual; moreover, in some men there is a disposition towards femininity and in some women towards masculinity. The human body may be regarded as a very complex community of bisexual cells with differentiated structures and functions, which, originating from a single bisexual cell—the fertilised ovum—has during the phases of its development maintained its organic unity by a harmonious interrelation and integration of function effected by exciting and inhibiting subtle bio-chemical stimuli (hormones), conveyed by the circulating blood and lymph and by exciting and inhibiting bio-physical stimuli conveyed by the various systems of neurones constituting the cerebro-spinal and autonomic systems. The whole human organism, with its dominant male or female characters, constitutes the ego-complex or individual personality, which in its life of external relation is continually making conscious and unconscious adjustments to environment by its sensori-motor mechanisms, in subservience to the three primal instincts of self-preservation, of preservation of the species and of the instinct of the herd.

SECONDARY SEX CHARACTERS.

Up to puberty the mental and bodily activities are mainly directed towards the growth and development of the body, the capture of food, enjoyment of food and of play, and the avoidance of pain and injury; the psycho-physical energy is all absorbed in ministering to

the instinct of self-preservation, and the self-regarding sentiments are dominant. During this period the metabolism of girls is probably not very different from that of boys; the chemical processes are mainly engaged in growth of the body. With the onset of puberty and the maturation of the reproductive organs, the sexual hormones pass into the blood and impress on the body not only the visible sexual characters distinctive of male and female, but they reinforce in every cell of the body the predominant male or female characters, thus endowing the whole complex organism with an innately determined capacity not only to act and feel in a particular manner characteristic of the sex, but also to perceive the object upon which the action and feeling are directed in order to accomplish the supreme biological end—reproduction, and the preservation of the species. In adolescence the instinct of sex, male and female, pervades and appropriately energises all the organs and tissues of the body in the normal individual. But there are feminine men and masculine women in whom the instinctive energy of one sex does not wholly prevail, and males are met with having feminine tendencies in mind and body, and conversely females with male tendencies in mind and body. These tendencies are shown especially in the latest evolved human characters, and are therefore psychical, although frequently the secondary sexual characters are affected to some degree. A new and great source or spring of psycho-physical energy is brought into being at puberty and adolescence, and with it a complete mental revolution. The most obviously characteristic change is an increased interest in the opposite sex and in one's own sexual feelings and sex characters. The sexual instinct is, however, a foundation of altruism, for it embraces, even in animals, savages and primitive peoples something more than the self-regarding pleasure of gratification of the desire, which by moralists is called lust; for the sexual instinct would be biologically incomplete without the instinctive tender emotion of the male toward the female and offspring manifested by protection of them, and the still stronger instinct of protection and preservation of her offspring by the mother. The highest moral sentiments, indeed, have their roots in this primal instinct necessary for the preservation of the species.

When we realise that the intellect of man in the process of evolution has, within comparatively recent times, been superimposed upon this strong animal instinct, the gratification of which is attended with intense pleasure and its repression with a longing of unfulfilled desire and mental pain, and further when it is considered that social conditions and progress of modern culture and civilisation tend more and more to frustrate the end of this strong primal instinct, which Nature designed for the preservation of the species, a physiological disharmony arises which not only endangers the happiness and contentment of

mind of numbers of civilised human beings, but also threatens the race with decay. The herd instinct is intimately associated with the sex instinct in this problem, for the bond of union of the herd is a willingness on the part of each member to sacrifice individual interest and life in the interests of the herd. Self-preservation thus becomes secondary to preservation of the species.

THE CHANGE OF THE MENTAL ATTITUDE OF THE MALE AND FEMALE AT PUBERTY.

The change in the mental attitude of the male and female at puberty is shown by conduct in a variety of ways, but the emotions and passions are revealed in a similar manner by gesture language by all people, whether primitive or civilised; it is not surprising, therefore, that the psychoses and neuroses which affect human beings with an inborn neuropathic tendency dependent upon or correlated with disorders of repressed or perverted sex instinct present the same fundamental symptom-complexes in all human beings. But all psychic activities are subordinate to, and dependent upon, physiological processes, and I would put forward the premise that a disintegration of the psychic unity may be conditioned by a disintegration of the physiological unity. The functional correlation of mind and body is shown by the profound influence the reproductive endocrine system has in the evolution at puberty of the sentiments which have their roots in the sex instinct. Not only the highest altruistic sentiments of love, pity, and devotion, but the baser sentiments, *e.g.*, pride and vanity, arise from the biological instinct of self-display for attracting the opposite sex manifested by savages as well as civilised people by a regard for personal appearance and adornment by dress, ornaments and jewels.

Again, the cause of jealousy is usually resentment of the loss or suspected loss of the love of another for whom there is a sexual attraction which may find vent in hatred and vengeance. In the female these sentiments are more prolonged, more contemplative, and are felt more; and because she, unlike the male, is unable herself to react openly, impulsively, and violently upon her rival, the sentiment is generally repressed, causing a mental conflict which may end in a neurosis or psychosis. It is not surprising, therefore, that disappointed love is by no means an uncommon assigned cause of a mental breakdown. But sexual love cannot be separated from self-love, with which it constantly interacts, and a broken-off engagement, by wounding the *amour propre*, causes shame and humiliation, which the maiden represses and conceals because she expects little real sympathy from her own sex, and not infrequently she fears ridicule or contempt.

In adolescence the natural self-assertiveness of the young animal to

become independent and leave its parents to find a mate is shown in the human adolescent by vague longings and desires, while old affections are allowed to lapse; and this becomes a disturbing mental element, for it is not understood why the affections of parents and family and the home in which they were born and bred no longer satisfy the desires.

Attraction to the opposite sex when frustrated either by lack of opportunity or initiative often leads to a shut-in, brooding personality. The psychology of adolescence has been the inspiration to the poet, the novelist, and the dramatist. Adolescent love is the central subject of all romance. Shakespeare depicts the *joie de vivre*, the *élan vitale* in the young man of passion, Romeo, who by the attraction of Juliet says—"My bosom's lord sets lightly on his throne, and all day long an unaccustomed spirit lifts me above the ground with cheerful thought," and Hamlet, the melancholic introspective, highly intellectual young man of meditation and irresolution, who rejects Ophelia's love with the words, "Get thee to a nunnery," and Henry V, the young man of action, inspired by ambition, devotes all his psycho-physical energy to the conquest of France and the consolidation of his Kingdom by marriage with the French princess.

It would take too long to develop further this subject of the psychology of adolescence, but I will be content to quote two passages from Clouston: "We know as a fact that all the higher, emotional, intellectual, imaginative and volitional qualities of the brain arise between fourteen and twenty-five, and that the absolutely new and intense feelings connected with reproduction commence *de novo* during that time."

After describing the visible morphological signs of a bad neurotic heredity Clouston states: "Doubtless by far the most important and subtle of the developmental defects are not those affecting the outward form of the body, nor the visible shape of the organs, but are those affecting the self-nourishing power and energising of the cells and the correlation of one centre to another." It will be my endeavour in the following two lectures to support this hypothesis of Clouston by facts concerning the structural and functional changes in the reproductive system and the nervous system.

LECTURE II.—*March 9th, 1921.*

THE MORBID CHANGES IN THE REPRODUCTIVE ORGANS OF THE TWO SEXES COMPARED IN CERTAIN FORMS OF MENTAL DISEASE, GERMINAL AND ACQUIRED.

In my last lecture I dealt with the normal conditions of reproduction; in this lecture I propose to consider first "The Morbid

Changes in the Reproductive Organs of the Two Sexes compared in Certain Forms of Mental Disease, Germinal and Acquired."

By an investigation of the microscopic appearances of the testes in 100 cases of deaths occurring at all ages, from birth to eighty-six, in London asylums and various military hospitals, and of the seminal fluid in the vesiculæ seminales in a considerable number of these cases, the full account of which was published in the *British Medical Journal*, November 22nd, 29th, and December 6th, 1919, I was able to formulate certain general conclusions regarding spermatogenesis and its continuance in spite of advanced age and fatal microbial disease, even of prolonged duration, and I gave reasons for supposing that the lipoid granules contained in the testes acted not only as the phosphorised raw material of nuclear activity and cell proliferation necessary for spermatogenesis, but as a protective barrier to the effects of circulating toxins.

EXAMINATION OF SEMINAL FLUID.

Examination by dark-ground illumination of the seminal fluid obtained from the vesiculæ seminales enabled one to observe some spermatozoa alive and active eight hours after death in two cases. One of these cases was a juvenile general paralytic, who died in an epileptiform seizure. Examination of dried films of the seminal fluid stained with hæmatoxylin eosin of a healthy man who died the same day from injury, showed the heads of all the spermatozoa stained by the basic dye, whereas in numbers of persons dying of various chronic diseases the majority of the spermatozoa were stained pink by the acid dye, indicative of a death change. May not this indicate a survival of the fittest spermatozoa in the vesiculæ seminales and a protective provision of Nature against fertilisation by weak organisms?

As a rule, in advanced cases of dementia præcox, the vesiculæ contained no spermatozoa. The spermatozoa showed in several of the early cases, in which the opportunity occurred for examination, marked degenerative changes (*vide* Plate I, fig. 1B).

EXAMINATION OF EMULSION OF TESTIS BY DARK-GROUND ILLUMINATION.

Now, examination by dark-ground illumination of the seminal fluid obtained from the vesiculæ seminales in thirty cases dying of tabo-paralysis and general paralysis has almost invariably shown some spermatozoa, generally in large numbers and even in cases of advanced ages—for example, one case of arrested general paralysis was æt. 69 at death. A variable number of the spermatozoa gave a normal staining reaction.

Emulsion of testis examined by dark-ground illumination showed that in the greater number of cases of general paralysis there was active spermatogenesis occurring in spite of advanced brain disease with its accompanying dementia and paresis.

EXAMINATION OF STAINED FILMS OF SEMINAL FLUID.

Films of the semen from the vesiculæ were stained and showed normally stained spermatozoa, together with large but varying proportions of degenerating forms. In no instance did the seminal fluid show the same deficiency in numbers of spermatozoa or such degenerated forms as in the semen contained in the vesiculæ seminales in the majority of cases of dementia præcox.

EXAMINATION OF SECTIONS OF TESTIS IN CASES OF GENERAL PARALYSIS.

Microscopic examination of sections of the testis of cases of general paralysis showed in a considerable proportion of the cases, in one and occasionally in both testes, strands and islands of completely atrophied tubules amidst normal tubules *with active spermatogenesis*. Seeing that where this atrophy occurred islands of normal Leydig cells could be found, it must be concluded that the atrophy of the spermatogenic tubules was not due to a general inflammatory syphilitic process, but probably to local inflammation and obstruction of the vasa efferentia by gonorrhœa or syphilitic infection or by arterial disease.

Now a comparison of the conditions found in this acquired disease—general paralysis—with conditions found in the vesiculæ and testes of cases of a germinal disease such as imbecility, idiocy and dementia præcox is striking.

EXAMINATION OF SECTIONS OF TESTES IN DEMENTIA PRÆCOX AND CONGENITAL IMBECILITY.

The testes of twenty-two cases of dementia præcox were examined, and for brevity I shall describe three stages of regressive atrophy, but they all merge into one another from the earliest stage, where there exists only slight morphological and bio-chemical changes in the heads of some of the spermatozoa (*vide* Plate I, fig. 2), and a diminution of the basophil staining of the nuclear substance of the spermatocytes, to a complete regressive atrophy of all the seminiferous tubes, leaving only the basilar membrane much thickened and a few syncytial cells of Sertoli, so that the microscopic appearances of sections of the organ as regards capacity for function in many of these advanced adolescent cases was less obvious than in the testes of an old man of eighty-six.

Indeed, the testis and seminal contents of the vesiculæ of an old man of eighty showed more evidence of virility than many of the earlier cases of dementia præcox. In more than half of the cases of dementia præcox there was a complete regressive atrophy and no evidence of spermatogenesis (*vide* Plates II–VII). As a rule it may be said that the earlier the onset of the mental symptoms the more likely was this complete regressive atrophy to occur; and it is quite possible some of these cases were prepubertal⁽¹⁾ in origin and spermatogenesis had never occurred, but this prepubertal condition certainly did not apply to a number of the cases of complete regressive atrophy. A long duration of the disease was the other factor which could be correlated with complete regressive atrophy. Speaking generally, the earlier the onset of mental symptoms and the longer the duration of life after their onset the more advanced was the regressive atrophy. In one case diagnosed adolescent mania and subsequently dementia præcox, I found numbers of spermatozoa in the vesiculæ; hardly any of them, however, presented a normal appearance and staining reaction. Sections of the testis showed active spermatogenesis, but when examined with an oil-immersion lens there were seen morphological and bio-chemical changes in the heads of many of the spermatids and immature spermatozoa.

Out of six cases I examined of congenital imbecility or idiocy, three of which were associated with epilepsy, 5 showed complete arrest of spermatogenesis. One case, a high-grade imbecile, showed active spermatogenesis, although death occurred from tuberculosis and broncho-pneumonia.

I do not deny that masturbation, which so many adolescent demented practise, may be a contributory factor in this regressive atrophy by the loss of seminal fluid and exhaustion of the phosphorised lipoid, but I agree with Kräepelin that it is not the essential cause; for sexual excesses and excessive masturbation in other forms of insanity, *e.g.*, general paralysis, do not cause this regressive atrophy. Moreover, we shall see that regressive atrophy of the ovaries occurs, and even if females suffering with this disease practised masturbation it would not cause exhaustion of the nervous system by loss of phosphorised lipoids.

The greater number of these cases of dementia præcox died of pulmonary tuberculosis, but we have seen that in other mental cases that died of pulmonary tuberculosis spermatogenesis was found; moreover, some of the cases died of acute lobar pneumonia after a few days' illness. Therefore tuberculosis cannot be assigned as the essential cause, although it may have been a contributory factor in the regressive atrophy of the reproductive organs in some cases.

(1) Kraepelin from clinical observations considers that there are prepubertal cases, and these are said to suffer from dementia precocissima.

EXAMINATION OF THE OVARIES IN MENTAL AND BODILY DISEASE.

Examination of the ovaries of 100 cases dying of various diseases do not give such clean-cut results as the testes, owing to the fact that chronic infective diseases have a more profound effect in preventing or arresting complete maturation of follicles, yet a comparative examination of the ovaries in cases of dementia præcox, congenital imbecility and epilepsy with other forms of mental disease, especially general paralysis, yielded similar results to those observed in the male sex; for the microscopic appearances of section of the ovaries are suggestive of a lack of specific vital energy of the reproductive organs in dementia præcox and congenital imbecility. But these diseases are due to an innate germinal deficiency, whereas general paralysis, an acquired disease, is due to an infection of the brain by the spirochæte of syphilis. Consequently, as might be expected, the ovaries of general paralytics who have died before the onset of involution do not exhibit a failure of the primordial follicles to undergo maturation, or, at any rate, not nearly to the same degree as in dementia præcox.

THE OVARIES IN DEMENTIA PRÆCOX AND GENERAL PARALYSIS.

To the naked eye the germinally deficient ovaries of patients suffering with dementia præcox and congenital imbecility are smaller and weigh much less than normal; sometimes they are no larger than those of an infant. Even in young females who have had a baby (and among my cases there have been none that have had more than one baby), the ovaries are much smaller than normal. The three or four cases that had had a pregnancy showed corpora lutea vera, but these were at least two years old, and there were no recent ones observable. The surface of the ovary of cases of dementia præcox had usually a white crinkled appearance, like a chestnut that had been peeled, and showed no superficial maturing follicular cysts. When the ovary is cut through the tissue is dense, and seldom shows any internal follicular cysts; sometimes the sections show a few old corpora lutea vera, but comparatively to the general paralytic or other forms of mental disease they are very few in numbers and small.

In many of the cases menstruation had ceased for some time, or there was a history of irregularity or amenorrhœa.

A similar state of regressive atrophy or failure of development was observed in a number of cases of congenital imbecility, especially when associated with epilepsy.

MICROSCOPIC EXAMINATION OF THE SECTIONS.

In dementia præcox there was no evidence of recent maturation of the primordial Graafian follicles, or if there were these follicles exhibited

appearances pointing to their soon becoming atretic. In some of the cases there was evidence of atretic follicles having been formed in earlier life by the existence of small corpora atretica such as may be found in the first year and later child life. The continuous zone of layers of primordial follicles found in early life, in some cases of congenital imbecility in the adolescent and in the normal adolescent female is not seen in dementia præcox. Instead one has to search for small groups of primordial follicles in the dense stroma. Sections stained for lipoid show that the ova are undergoing degeneration, droplets of fatty matter being seen in the cytoplasm and nucleus. Examination of sections stained to show the chromatin network of the nucleus and examined with an oil immersion lens showed appearances pointing to degeneration of the primordial follicles and replacement by the invading stroma. I will show a group of four, the best I could find, in a section where the greater number had disappeared. These show all stages of degeneration. One, the most healthy-looking, has had enough vital energy to have promoted the formation of a single enclosing layer of epithelial cells, but not enough to excite proliferation and produce a zona granulosa and discus proligerus, such as we find continually occurring in the ovaries of the infant. The other three ova show no commencing zona granulosa, and one is being invaded by the stroma (*vide* Plates VIII and IX). In general paralytic cases that died at an age under 37, including a case of juvenile general paralysis, we find a condition pointing to active reproductive processes analogous to those found in the male reproductive organ. For there are usually numbers of corpora lutea vera, showing that normal maturation and escape of the ovum had occurred, besides numbers of Graafian follicles going on to atresia, evidence of sufficient vital energy while the patient was suffering from the paralytic dementia to mature and form large and small atretic follicles—a condition which is not found, or only to a very limited extent, in dementia præcox.

WHY SHOULD THIS DEGENERATION OF THE GERM-CELLS COME ON IN ADOLESCENCE?

Dr. Laura Forster laid considerable stress upon the experiments of Ceni upon birds in support of the correlation of the dementia with changes found in the ovaries. He removed one hemisphere, and the birds surviving the traumatic shock were killed after varying periods of a few months to three years, and their ovaries were subsequently examined histologically. The primary shock had the effect of causing them to cease laying eggs for some months. In the following year they began to lay again, but in the second year fewer eggs were laid, or the birds ceased altogether from laying. The birds were otherwise in a

healthy condition. The examination of the ovaries showed a premature progressive involution. Ceni concludes that there are intimate relations between the brain and the ovary. It would have been interesting if Ceni had conducted similar experiments on male birds, and proved that lesions of the brain can produce a premature dynamic exhaustion of the testis. Inasmuch as in paralytic dementia one finds the reproductive organs exhibiting normal activity this conclusion of Dr. Forster does not hold.

The before-mentioned facts all show that in dementia præcox there is an inborn lack of specific energy in the germ-cells, and that relatively few have sufficient energy to mature; the great majority, therefore, die prematurely. The cases of dementia præcox that became pregnant and gave birth to a child and then developed the disease may be considered on the following broad biological grounds: The body is the vehicle for the germs, and whatever vital energy depending upon the sex instinct of reproduction remained in the mother was absorbed by the developing offspring. The regressive atrophy of the reproductive organs cannot be accounted as a direct cause of the mental and bodily signs and symptoms of this disease; otherwise castration would effect the same condition. It must, therefore, be only a part of a degenerative pathological process. If, however, we consider that the sex instinct necessary for preservation of the species pervades and energises in adolescence the whole of the bodily structures, and with the instinct of self-preservation constitutes the *élan vitale*, then we must regard the disease as a lack of vital energy of the whole body, but this lack is most manifest in the two functionally specialised organs most intimately connected with reproduction—*viz.*, the organ concerned in the production of the male or female germ-cells and the brain in their conjugation. In discussing the changes in the nervous system in my concluding lecture I shall deal with this part of my subject more fully.

If the subject be approached from an evolutionary point of view, we may consider that Nature, unmindful of the preservation of the individual and mindful only of the preservation of the species by survival of the fittest, would, by bringing on in adolescence a regressive atrophy of the reproductive organs, stop procreation of a degenerate stock.

NEUROPATHIC OR PSYCHOPATHIC HEREDITY.

Maudsley, in his *Pathology of Mind*, says:

“First that a person does not inherit insanity but a predisposition or tendency, and secondly, that the tendency comes from the stock. Nor need the unsound strain in the stock show itself in any form of actual insanity; it may appear in some allied nervous disorder, in

hypochondriasis and suicide, in feeble-mindedness, in dipsomania, in epilepsy in its manifold forms and other periodical nerve-storms, in eccentricity, in religious fanaticism, in the melancholic suspicious temperament, in selfish cunning, avarice and meanness."

Dr. Macpherson, in the paper to which I referred in my last lecture, says:

"The war has demonstrated what Maudsley long ago indicated—that one and the same cause may originate in neuropathic persons any of the various forms of psychoses or neuroses depending upon the particular temperament or idiosyncrasy of the individual. The acceptance of the view of the identity of the psychoses and neuroses would imply the belief that they share in common an inborn constitutional defect which is ineradicable and irremediable, of which the varying crises and the tendency to periodicity and recurrence are the phenomena."

It is not easy to decide whether a stock is neuropathic or psychopathic by ascertaining whether any member had been in an asylum, for any neurosis or uncertifiable psychosis or condition suggestive of mental instability would suffice to prove the existence of a germinal neuropathic tendency—the existence of which is not easily determined. The war has shown that a very considerable percentage of the male population are potential neuropaths, and it only required the necessary stress of fear and exhausting nervous strain to reveal the same.

NEUROPATHIC OR PSYCHOPATHIC INHERITANCE IN RELATION TO THE INSANITY OF ADOLESCENCE.

It is generally admitted that adolescent insanity is much more likely to occur in stocks where there is a recognisable or known neuropathic or psychopathic hereditary predisposition. But cases of dementia præcox occur in stocks where there is no ascertainable hereditary taint. It occurs also in primitive races. How can we account for this it might be asked? When we consider that at each coitus there may be over 200,000,000 spermatozoa ejected, each with its own specific energy, chance comes into play as regards fertilisation of the ovum by a spermatozoon carrying characters varying from the normal in the latest and highest products of evolution. Again, it may be that one of three or four hundred ova that can escape into the uterus to be fertilized may carry a variation from the normal and become fertilised; or, again, it may happen that a variation arises from incompatibility of the determinants conveyed by the male and female germs. Such a hypothesis would explain why a genius or an imbecile may arise from the union of two reputedly sound stocks.

But there is always the question whether these evolutionally latest developed characters or the vital energy of the whole body may not be

modified adversely in the germ-cells of a healthy stock by the prolonged toxic influence of such race poisons as alcohol, syphilis and tubercle, and whether this variation can be transmitted as an acquired character. I have already given reasons why this assumption is doubtful from the examination of the seminal fluid and testes in a large number of cases of syphilis and chronic infective diseases such as tuberculosis, chronic dysentery, etc. Some authorities have asserted that syphilis may in this way cause dementia præcox. As far as my observations go I have not found cases of dementia præcox give a plus Wassermann reaction, either of the blood or fluid. Moreover, syphilis is a very common disease. Undoubtedly congenital syphilis causes imbecility and juvenile general paralysis, but this is due to the presence of the spirochætes in the brain. In a number of cases of juvenile general paralysis normal spermatogenesis and follicle formation may be found. Moreover, dementia præcox occurs in races where syphilis is unknown.

Dr. John Macpherson has recently in an interesting article on the "Identity of the Psychoses and Neuroses" shown that primitive people in all parts of the world suffer with nervous affections of germinal origin, but they do not suffer with such acquired diseases, e.g., general paralysis, unless they be syphilised. Naturally racial and environmental conditions give a particular or local colour to the neuroses and psychoses, but fundamentally they have the same symptomatology. Both Kraepelin and Van Brero point to the fact that dementia præcox is a common affection among the native Javanese, and the former ascertained that auditory hallucinations are not commonly met with. Probably this can be accounted for by the fact that these people being analphabeten, their mental furniture consists largely of concrete images, rather than abstract linguistic symbols. The expression of thoughts and feelings by language of graphic and auditory symbols is a recent development comparatively to the language of the emotions. For the same reason probably dreams are usually visual representations rather than auditory.

Maudsley has remarked that Nature tends to end or mend a degenerate stock. How could this be brought about?

(1) By rendering the psycho-physically weak infertile. This I have shown actually occurs in the case of a large proportion of cases of dementia præcox and congenital imbecility, especially when the latter is combined with epilepsy.

(2) By segregating in relatively a few of the germ-cells the unsound elements, by a coalescence of similar diseased germinal determinants, as it were by a crystallisation. This would not only purify the stock by segregation of the diseased elements, but by concentration in a few of the offspring it would lead to intensification and antedating of the onset of the disease.

We have seen that Kyrle's results indicate that young male children with an insufficient vital energy of the germ-cells to carry them beyond the infantile stage perish from disease. In the female reproductive organ the ova that undergo complete maturation and escape are relatively few ; all the rest perish. This may mean a concentration of all the vital energy in the ova with the greatest potentialities.

THE CONDITION OF THE ENDOCRINE GLANDS IN DEMENTIA PRÆCOX.

The pituitary body has been examined in the few cases in which this organ was sent to me. Generally speaking the organ seemed small, not weighing more than 0.5 grm. So far I have been unable to discover any constant morbid change, but I have only examined the gland in a few cases.

The thyroid.—As a rule the weight of this gland was below normal, but here again I am not prepared to associate the change in the reproductive organs with any constant microscopic changes in this gland.

The adrenal glands.—The adrenal glands compared with cases of general paralysis and other forms of insanity dying in adolescence exhibit indications of a cortical deficiency in dementia præcox recognisable to the naked eye ; for the gland is diminished in weight and thickness, and when cut through the cortex is considerably thinner than in the normal. The glands from six cases have been examined microscopically by staining sections, cut with the freezing microtome ; these undoubtedly showed a diminution of the lipoid cholesterol esters in the cortical cells, especially of the zona fasciculata, but inasmuch as the lipoid of the cortex subserves many other functions than that of supplying lipoid cholesterol esters for the function of reproduction, notably as Elliot has shown in the production of antitoxins, it follows that even here there is no definite proof that this deficiency can be associated with the failure of the reproductive function. I fully realise the inadequacy of this part of the research carried out upon the endocrine system, but it seems to me to be of such fundamental importance that I hope to attack the problem by inducing medical officers to study their cases carefully during life by modern clinical methods associated with experiments on the respiratory exchange and metabolism in conjunction with my assistant, Capt. Sydney Mann, B.Sc., in the Pathological Laboratory of the Maudsley Hospital. This work should have commenced ere this but for the delay in utilising the hospital for the purpose its founder, Dr. Maudsley, intended.

OXIDATION PROCESSES IN THE BRAIN AND REPRODUCTIVE ORGANS.

There are many morbid anatomical and microchemical conditions found in the reproductive organs and the brain strongly suggestive of

deficient oxidation processes, which, combined with low blood-pressure, would cause a deficiency of psycho-physical energy in all the organs and tissues of the body, but especially would deficiency of oxidation processes affect the functioning of the reproductive organs and the brain with its different functional levels. There is some evidence in favour of this view, for Koch and Mann, working in the Claybury Laboratory, examined, at my suggestion, chemically the brains of nine cases, seven of which were cases of dementia præcox, and found a diminution of neutral sulphur independent of the cause of death and not found in other forms of insanity. These authors say: "It would not seem improbable to suppose that the subject of this mental disorder may possess a general bodily inherent deficiency for oxidation processes. Examination of other tissues of the body for neutral sulphur and its proportion to the total sulphur contents would help materially to decide this point. In the meanwhile some support to this view of a general inherent bodily deficiency for oxidation processes is afforded by Pighini's observations on the increase of neutral sulphur in the urine in this disease. It is obvious that an investigation of the hormono-poietic system needs an intensive study of a few cases by clinical chemical methods during life, followed by a thorough histological and chemical investigation of the ductless glands after death, the results to be compared with the results obtained by an investigation upon mentally normal persons suffering with similar fatal bodily diseases.

ANTEDATING OR ANTICIPATION.

From the study of numerous pedigrees I came to the conclusion that there was a tendency for insanity not to proceed beyond three generations. There is frequently either an apparent regression to the normal type or the stock dies out. Not infrequently the stock dies out by the inborn tendency to insanity manifesting itself in the form of congenital imbecility or in the insanity of adolescence. Such patients are, as I have shown, usually infantile, and are prone to die of tuberculosis; or if they are capable of procreating, their anti-social behaviour brings them into the asylum. Among primitive people the struggle for existence would be more severe than among civilised people and such cases would perish in various ways.

Morel, in 1859, pointed out that progressive uninterrupted transmission leads finally to special degenerative forms, to imbecility and idiocy, and with the diminished capability of propagation of the latter kind the stock therefore gradually becomes extinct. Antedating and intensification of heritable disease or predisposition to disease would not only lead to diminished vital resistance to poisons or germs of disease, such as alcohol, syphilis and tuberculosis, but also, owing to

lack of physical and mental ability to obtain the necessities of life, vital resistance is still further diminished ; so that the tendency is for the unsound members of the third or fourth generation of a mentally degenerate stock to die at a comparatively early age of some inter-current disease, especially tuberculosis, and thus propagation is prevented.

Unfortunately during the Great War these neuro-potentially unsound persons, of the great numbers of whom the pensions bill the Nation is paying is the best proof, were not fit for the front line, and were not therefore killed off to anything like the degree that the A1 physically and mentally sound men were.

The war in this respect, therefore, has not had the purifying effect that it had in ancient times when in the struggle for existence the mentally and physically strong alone could survive. In this country of doles to the unemployed, of whom a large percentage through mental or physical deficiency are unemployable, there is every opportunity given to the prolifically fertile high-grade moral and intellectual imbecile to propagate.

STATISTICS OF ANTEDATING.

In 1911 I published statistical data relating to the ages of onset of insane offspring and of insane parents. This was based upon a card system relating to 3,118 relatives who had been admitted into the London County asylums and made up from 1,450 families.

This analysis showed a signal tendency to the occurrence of insanity at a much earlier age in the offspring than in the parents. The accompanying graph is based upon 508 pairs of parents and offspring ; there were 464 insane parents and 508 offspring. Some of the parents had more than one insane offspring. All forms of insanity occurring in the offspring were included, as were all forms in the parents. In 1917, the analysis of the relative cards since 1911—a period of six years—was limited to insane parents and offspring in which a diagnosis of dementia præcox was made.

The numbers of cases were considerably diminished, as might have been expected, for in some of the London asylums the term “dementia præcox” was not employed, and only in comparatively recent times has it come into existence. The graph which I show is similar in its characteristics as regards the curves of the age of onset of the parents, but in respect to the age of onset of the offspring, instead of 47·9 being under 25 upon admission, 75 per cent. of the cases suffering with dementia præcox were admitted under the age of 25.

Seeing that a great many cases were either insane before certification or by their conduct had given prodromal evidence of oncoming insanity, it is probable that practically all the cases commenced before the

termination of the adolescent period of life. It will be noted that the parent's graph resembles very much that of a graph of the total admissions to the asylums.

The number of female offspring of insane parents suffering from dementia præcox are more numerous than the male offspring of insane parents, and the antedating is more pronounced, *viz.*, 23·67 years in the females to 17·81 in the males. Now that the war is over and medical officers better trained in psychological medicine in the asylums, it is hoped that more reliable records of diagnosis will be possible. Still, certain facts seem to come out, *viz.*, that dementia præcox is a disease of adolescence and that females are affected more than males; moreover many cases that commence in adolescence do not die for many years, in fact, some authorities would regard this as one explanation of the greater number of chronic cases on the female side in asylums, another factor being that general paralysis which is fatal in a few years is about four or five times as common among males.

Now why should dementia præcox affect females more than males as these statistics seem to indicate?

Firstly, the physical exhaustion of pregnancy: in quite a considerable percentage of cases of which I have examined the ovaries, mental symptoms came on after the birth of the first and only child. Secondly, the enforced frustration in a much larger number of women than men of the sex instinct and its biological end by modern social conditions. Another explanation may be offered why there have been more female cases of dementia præcox during this period admitted to the asylums than males is this: The whole male population was conscripted and a number of potential cases of dementia præcox were recruited; some were killed, some died of disease, others found their way into the military hospitals for nervous and mental diseases.

Inasmuch as this disparity of affection of the two sexes is not in accordance with pre-war experience this explanation seems much the more probable.

LECTURE III.—*March 11th, 1921.*

In my last lecture I dealt with the regressive atrophy of the reproductive organs; in this lecture I intend to describe the changes in the central nervous system, and endeavour to show how these two morbid changes may throw some light on one of the most important diseases of the mind.

The critical periods of life I have shown as regards mental disease are adolescence and the climacteric periods of life when the sexual function matures and wanes, and this alone affords *à priori* evidence of the important relations between the sexual functions and mental disease.

The question naturally arises whether the regressive atrophy of the sexual organs is the cause of the mental symptoms or is correlated with them.

(a) By a disturbance of the normal physiological equilibrium of the reproductive and endocrine glands, with a resulting toxæmia.

(b) By the suppression of the normal sexual libido and the psycho-physical energy associated with the sex instinct.

(c) By a germinal bio-chemical failure of the nuclear matter of the cells of the body generally, but of the reproductive organs and the brain in particular, associated with deficiency of oxidation processes and a corresponding deficiency of reproductive and psycho-physical energy.

I shall endeavour to show that the last premise is the essential cause, but that the first two are consequent and co-operate.

The arguments I would adduce are as follows :

(1) There is a general lowered vital reaction of the tissues to disease, anergic symptoms and low blood-pressure, and early cessation of reproductive powers. The amount of neutral sulphur in the brain is diminished, indicative of diminished oxidation processes.

(2) The morbid changes in the nervous system are most marked, and especially affect the nuclei, cytoplasm and dendritic processes of the neurones of both the first and second type of Golgi. The fibres are scarcely affected at all, indicating that the neurones are for the most part not dead, but fail to function. These changes and their significance when compared with the changes met with in an acquired disease, *e.g.*, general paralysis, may best be explained by a failure of function due to an insufficiency of oxidation processes involving the molecular oxygen brought by the blood-streams being converted into free atomic oxygen—by the katalytic action of the nucleus upon the oxidase granules.

(3) A number of cases of dementia præcox show prepubertal clinical signs with history of arrest of development of mind which can be explained by arrest of development of cortical neurones, and at puberty when the stress of productive energy of the reproductive organs occurs nuclear neuronic failure again shows itself by the onset of fresh symptoms of mental defect and disintegration of the psychic unity. This nuclear decay or loss of durability is of germinal origin, for there is simultaneously a progressive failure of nuclear formative activity in the organs of reproduction. At what period in early life this nuclear failure of the brain and reproductive organs occurs it is difficult to determine in individual cases, but I am of the opinion from histological observations that it begins in some cases before puberty—even long before puberty—and Kraepelin points to the fact that in many cases clinical symptoms occur in prepubertal life, so that it is legitimate to conclude that there are a number of cases which might be termed “dementia præcossisima.”

Before proceeding further it is necessary to call your attention to certain anatomical and physiological premises upon which I shall base my arguments regarding the psycho-pathology of dementia præcox.

THE OXIDASE REACTION.

If a portion of the brain or a section of spinal cord taken from an animal immediately after death be stained for the oxidase reaction the grey matter is coloured blue, the white matter is unstained.

Marinesco has demonstrated that histological examination of the sections shows that the cytoplasm of the ganglion cells, as well as their protoplasmic prolongations, are studded all over with fine blue-stained granules. Neither the nucleus nor the axis-cylinder process contains any trace of granules. This agrees with the observations made by this author and myself in respect to the absence of refractile granules in the nucleus and axon when a living nerve-cell is examined with the ultra-microscope. Marinesco found these granules in the cells of the choroid plexus, but none in the neuroglia cells. Marinesco remarks it is probable that these oxidase granules belong to the neurone terminals which constitute the synapse and establish connections between the different neurones.

"It is especially in the plexiform layers, as is the case for the so-called granular layer of the cerebellum and of the brain, that these oxidase granules are very numerous."

These facts clearly indicate that oxidation processes take place in the grey matter, and that the intercalary cells, Type II Golgi (granules), which form the physiological link in systems of neurones of the first type, play an important part in the chemico-physical processes of the synapses.

Now if oxidation processes which occur in the grey matter are essential for all nervous activity (including psychical), and if it be that molecular oxygen of the oxidase granules must be converted into free atomic oxygen to ensure neuronic function, it follows that deprivation of oxygen carried in the circulating blood will cause suspension of function. This is the case, for Mosso has shown, in a patient of his who had been trephined, that unconsciousness invariably occurred six seconds after pulsation in the brain had been caused to cease by compression of both carotid arteries.

It is calculated that there is six times as much blood in the grey matter as in the white matter. It was asserted by Leonard Hill that the oxygen content of the blood leaving the brain was as great as that of the blood entering. Bayliss gives reasons why this conclusion is not valid. Moreover, it must be remembered that the amount of grey matter to white matter in the brain is relatively small, and we know that no active oxidation processes take place in the white matter. This

fact also disposes of the argument that Battelli's observations show that relatively to other organs in the body the peroxidase reaction of the brain is feeble.

It may be concluded, therefore, that oxidation processes are essential for neural function, and that oxygen for cerebral activity is continually being used up and replenished by the blood. I have shown that there is no free oxygen in the cerebro-spinal fluid, but there is as much CO_2 free and combined as in the lymph. If the neurones are bathed by the cerebro-spinal fluid, the sugar in the fluid may be a source of energy for the nervous system and be continuously undergoing a process of oxidation.

Now to continue the argument, we may assume the following premises :

All psychical processes are subordinate to physiological processes—that is neural activity.

All neural activity is dependent upon oxidation processes. These oxidation processes occur in the grey matter.

Oxidation processes are dependent upon the liberation of atomic oxygen from oxidase granules.

The oxidase granules are found on the body of the cell and the dendritic processes. They are especially abundant in the granule layers of the brain and the cerebellum. These granules are the intercalary neurones, second type of Golgi, and where they form definite layers they are interposed between radial fibres and the dendrites of neurones of the first type of Golgi forming a synapsis.

Granted Marinesco's observation, that in the granular layer the oxidase granules are especially abundant, it will be here especially that the atomic oxygen will be abundantly liberated under the influence of a nuclear catalase ; for these cells consist mainly of nucleus.

If the iron or phosphorus of the nucleus or both act as a catalyser, as there is reason to believe, it may be hypothecated that when a stimulus arrives at the layer of intercalary neurones a catalase is liberated from the abundant nuclear substance ; this acts upon the molecular oxygen attached to the oxidase granules, converting it into free atomic oxygen whereby physical and chemical changes occur, which either result in a physiological junction of the processes of the intercalary neurones by amœboid movement and multiple contacts with the processes of the first type of neurones, or a process of combustion occurs whereby the sugar is converted into energy, which serves as a source of stimulus to the next system of neurones.

Whatever it be, it is significant that these intercalary neurones should exist in well-defined layers and in such abundance in cortical situations where radiating and association tracts of fibres are ending, *e.g.*, the calcarine region where there is a double layer of granules.

Again, the great abundance of granules in the cerebellum is very significant for the following reasons :

The cerebellum is an organ of uniform structure ; it is present in all mammals. In fast-swimming fishes and mammals, *e.g.*, seals and sea-lions, it is very large ; it is very large in all fast-flying birds, especially birds of prey. This biological fact, together with the results of experiments on animals and clinico-anatomical observations in man, shows that this portion of the brain is an organ of reinforcement of muscular action, and continuous tonic contraction of the muscles depends upon its functional activity. Under the influence of stimuli from the skin, especially the soles of the feet and all the structures of locomotion, the eyes and particularly the semicircular canals, a continuous discharge of neural energy along the rubro-spinal and vestibulo-spinal tracts takes place, reinforcing with varying degrees of intensity as required the discharge from the spinal motor neurones to the muscles. It has been shown by Luciani that removal of the cerebellum in animals causes atonia, asthenia, astasia and ataxia. The layer of granules which form such a striking feature of the cerebellum may be assumed to provide an abundance of catalase for the conversion of the molecular oxygen into atomic oxygen and thus effect a continuous flow of neural energy. These and other considerations show that the oxidation processes necessary for neural activity take place at the junction of the intercalary neurones with the neurones of the first type. It is here that delay occurs in the transmission of a stimulus along a system of neurones. It may be assumed that either the chemical changes connected with oxidation are transformed into a physical stimulus, which travels along the next neuron of the first type, or the oxidation processes cause either an alteration of the surface tension or an amœboid movement whereby a physiological junction is effected at the synapse so that the original impulse can be transmitted. The extent, character and intensity of the stimulus and its motor reaction are largely dependent upon the biological quality of the stimulus, for groups and systems of neurones are attuned by an instinctive memory or bio-rhythm to react to a biological stimulus with a specific rhythm with maximum intensity, but owing to the fact that a system of neurones with a special function is attuned to a specific bio-rhythm, a stimulus of any kind will give rise to a specific effect. This fact is proved by a simple experiment. A faradic current applied to the skin causes an uncomfortable vibration sensation ; applied to the tongue, a taste sensation ; to the eyeball, a sensation of light ; to the drum of the ear an ill-defined auditory sensation. So that owing to this inherent specific bio-rhythm of the special sense-neurones the same stimulus produces the specific effect. It may be presumed that a common mode of motion has been transformed to a special mode of motion.

Oxidation processes do not take place in a nerve, and it is incapable of fatigue. The nervous impulse as it travels along the axon is a physical disturbance unattended by any chemical change, but when the impulse reaches the terminal brush of fibrils in the grey matter it may be assumed that it liberates a catalase and oxidation processes occur.

NISSL GRANULES AN ARTEFACT, BUT THEIR PRESENCE OR ABSENCE IN DEAD CELLS OF GREAT SIGNIFICANCE.

The living nerve-cell does not contain Nissl granules but a number of minute oval or spherical granules, which, if they escape from the cell, remain discrete. By dark-ground illumination they reflect the light and appear white; by direct illumination they appear dark and very much like an emulsion. When the cell dies these disappear, and if certain fixing reagents, such as alcohol, formol or sublimate solution be employed, a coagulation of the proteid constituents of the cytoplasm occurs causing the formation of the Nissl granules. These granules, as shown by their staining reaction with basic dye, consist of a basophil nucleo-proteid substance.

SIGNIFICANCE OF THE DISAPPEARANCE OF NISSL GRANULES.

The cytoplasm of all nerve-cells contains this basophil substance, and inasmuch as it diminishes in amount or even disappears in exhausted cells it has been supposed to be the energy substance of the cell—hence has been termed “kinetoplasm.” Consequently, although the basophil substance does not exist in the form of Nissl granules in the living cells, yet a comparison of the histological appearances, as to its distribution and amount in normal cells, with the appearances presented by similar cells in morbid conditions, affords a reliable method of determining functional or organic changes of the neurones.

The Nissl granules are especially abundant and form a tigroid pattern in the large motor and sensory cells of the stem of the brain and the spinal cord; they also exist in the Purkinjé cells, the large pyramids of the cortex, and especially are they well seen in the Betz cells. In the smaller cells they are not distinctly seen, but their cytoplasm contains basophil substance in all normal cells of Golgi type I.

Morphological changes in the cytoplasm as regards the amount, distribution and arrangement of the basophil substance (chromatolysis) may therefore be correlated with disease and functional disorders of particular systems and communities of neurons having specialised functions.

Still more important are biochemical changes indicated by an

alteration in the staining reactions of the cell, for they may point to a morbid state or to the death of the cell. Whereas the morphological change previously referred to leads to depression or *suspension* of function, a biochemical change indicates a *suppression* of function. If polychrome or toluidin blue and eosin dyes be employed for staining sections we may obtain a basophil and acidophil reaction; thus a motor cell which has undergone a death-change, *e.g.*, from experimental anaemia or hyperpyrexia, stains a diffuse dull purple, the processes as well as the body of the cell having a homogeneous instead of a differential reaction to the dyes (*vide* Plate X).

Macallum has shown that the Nissl granules contain both iron and phosphorus; the basophil substance is therefore a nucleo-proteid, and, as I pointed out in my Croonian Lectures in 1900, diminution of this substance may be "an expression of the diminution of the vital interaction of the highly phosphorised nucleus upon the cytoplasm."

The abundance of nucleo-proteid, with its important iron, calcium and phosphorus constituents in the cytoplasm of the large multipolar motor cells, may be correlated with a greater potentiality for chemico-physical changes in large cells with large and relatively long axons.

The small intercalary neurones (second type of Golgi) have little or no basophil substance in the cytoplasm; the nucleus is relatively very large, but we have seen that these cells enter into the synapse of neurones of the first type.

LIPOID GRANULES IN THE CELL AND THEIR SIGNIFICANCE.

In healthy young animals lipid granules are not seen in the cytoplasm of the neurones; they are found normally in the cells of old animals. These granules are also found in varying amount in the cells of the brain and spinal cord of human beings dying of various diseases. Thus I have found them in abundance in myasthenia gravis, to a slight degree in death from shock caused by compound comminuted fracture of the thigh from gunshot wound. They are found in old people dying of various diseases, but I have found them especially abundant and universal in the brains of cases of dementia senilis, general paralysis, dementia præcox and amaurotic idiocy. That these are not due to *post-mortem* autolytic processes is shown by the fact that these fatty granules can be seen in the perivascular sheaths and the cells of the choroid plexus. The changes observed in dementia præcox, moreover, resemble those observed in simple senile dementia (*vide* Plate XI, fig. 2).

Pighini has made a special study of the cause of their appearance, and has shown that if pieces of the brain of a healthy dog are kept in Locke's fluid in a warm chamber for twenty-four hours, these granules appear and increase in number with the length of time the tissue is kept

under these conditions. Controls showed that these were not present in the tissue before they were placed under these conditions.

The facts seem to show that up to a certain point the presence of these lipoid granules may be within physiological limits and be only a sign of deficient metabolism, incidental to a failure of complete oxidation processes, and their existence, therefore, is not inconsistent with a normal, although probably lowered, functional activity of the neurones so affected. But when the cytoplasm of a large number of cells contains abundance of these granules the physiological limit has been passed, and they are an indication of a pathological condition associated with a depression of function sufficient to give rise to impairment or even cessation of function. In amaurotic idiocy the whole of the neurones throughout the cell-body are filled with scarlet-stained globules. In dementia præcox the cells of the cortex, the basal ganglia, and the medulla exhibit this change. Especially does the process affect the cells of the frontal lobes (*vide* Plate I). Pighini concludes that these fat granules are unsaturated phosphatides, for they yield a blue-violet colour with Nile blue sulphate.

These granules stain red with Sudan III, and according to Pighini this would indicate a participation of cholesterin or of its esters with cerebroside. The tendency of the granules to stain a violet-blue colour with Nile blue also suggests the presence of cholesterin. He believed that Marinesco and Obersteiner were correct in considering that these lipoid granules in the nerve-cells of old people are products of regressive metabolism, and that hypo-oxidation and pathological processes in which katabolism exceeded anabolism would account for their occurrence; they are probably therefore an expression of anabolic hypofunction.

Having thus considered in detail certain anatomical and physiological facts concerning normal neural structure and function, we are prepared to estimate the significance of the morbid changes observed in dementia præcox, and see how far they would account for the fundamental disorders of the mind in this disease. I will commence the subject with a brief reference to the supposed causes.

THE FUNDAMENTAL MENTAL DISORDERS OF DEMENTIA PRÆCOX.

Kraepelin accepts Bleuler's distinction of *fundamental disorders* and *accompanying phenomena* of the disease. *The fundamental disorders* are those which occur in dementia simplex and in the terminal state of *simple weak-mindedness*. From this point of view the weakening of judgment, attention, of mental activity and of creative ability, the dulling of emotional interest and the loss of energy, lastly the loosening of the inner unity of the psychic life, would constitute the fundamental

disorders, while all the remaining morbid symptoms, especially hallucinations and delusions, but also the state of excitement, depression and stupor, further the manifold disorders of volition, negativism, automatism, stereotypy, automatic obedience, mannerisms, grimacing, outbursts of meaningless laughter, etc., would be regarded as secondary *accompanying phenomena* due to disruption of harmonious psychic interconnections by the degenerative process affecting functional systems of neurones in varying degrees of severity.

HISTOLOGICAL MORBID CHANGES IN DEMENTIA PRÆCOX AS DESCRIBED BY VARIOUS AUTHORS.

Histological investigations hitherto, with the exception of the examination in a few isolated cases of the sexual organs, have been devoted to the central nervous system, especially the cerebral cortex.

Macroscopically the brain and the spinal cord in these cases show little evidence of any disease.

Microscopic investigations by numerous neuro-pathologists, notably Nissl, Alzheimer, Duston, and workers (Rae Gibson and Harper Smith) in my own laboratory, have arrived, broadly speaking, at similar results.

Kraepelin sums up the changes thus :

“Nissl, in the cases of chronic evolution, has noted profound modification of the cells, which he has described under the name ‘destruction of the nucleus.’ A considerable number of cells appeared to be destroyed, but there is no atrophy of the cortex. The deep layers contain numerous and large neuroglial cells.”

Alzheimer, studying histological lesions in acute cases of catatonia, has described grave alterations of the cells of the cortex, especially of the deep layers, notably swelling of the nuclei, infolding of their membrane, the cellular body retracted and on the way to destruction, and neoformation of neuroglial fibrils which surround the cells.

In the old chronic cases Alzheimer found wide-spread changes in the cells, which may be regarded as the terminal state of grave disease which has run its course, in particular sclerotic forms. Very frequently deposits of lipoid products of decomposition were found in the various cells, even in quite young persons. Strikingly frequent were groups of nerve-cells in which the basal processes appeared to be swollen and deformed by accumulation of fat. Lastly, diffuse loss of cortical cells could be observed. These severe morbid changes affected especially the second and third cortical layers.

The observations of Klippel and L’Hermitte have shown that these primary degenerative changes of the neurones may affect the whole central nervous system, and they consider that they are either due to

an inborn biochemical deficiency, or to the effects of an autotoxin circulating in the blood after the reproductive organs have arrived or should have arrived at maturity.

All investigators refer to glia-cell proliferation. Alzheimer, in acute cases, describes amoeboid hyperplasia of neuroglia, accumulation of glia-cells round the nerve-cells, and morbid new formation of fibres which surround the cells in a particular manner. Nearly all authors refer to the large swollen pale nuclei of the glia-cells, many of which can be seen adherent to, or even penetrating into, the decaying nerve-cells.

None of the authors refer to the change in the granule layers.

The histological investigations of the central nervous system in dementia præcox of all these eminent authorities are in agreement on certain fundamental points, *viz.*, that there is a parenchymatous degeneration of the neurones, and that the affections of the mesodermic vascular and supporting tissues are slight and of little importance, contrasting, therefore, most distinctly with the meningo-encephalitis of dementia paralytica and sleeping-sickness, both of which are due to a parasitic infection of the central nervous system.

The results of these observers clearly point to a primary parenchymatous degenerative process of the neurones and are in favour of the unicist conception of Kraepelin.

SUMMARY OF PERSONAL HISTOLOGICAL OBSERVATIONS.

None of the ten cases examined showed any thickening of membranes or obvious naked-eye change of the brain, in that respect contrasting plainly with dementia paralytica. Five of the cases died in pre-war times. Paraffin block-sections of various portions of the brains were prepared of 5 or 10 μ in thickness, stained by polychrome methylene-blue or methylene-blue and eosin. The remaining three were cases that have died within the last year or two. In these the brain was systematically examined both by paraffin block sections, stained in the same way as above, and frozen sections of formol-hardened material stained with Scharlach and Nile blue for lipoid granules.

The sections which had been prepared in pre-war days had retained their colour, and the results of the histological examination of these sections appended to the clinical notes of each conform, so far as they go, with results obtained in the recent cases.

Broadly speaking, the morphological changes correspond with those described by the previously-mentioned authorities. They confirm the results obtained by Klippel and L'Hermitte regarding the extension of the degenerative cell-changes to the whole brain, including in two cases

the cerebellum. They also show that there are two types: (1) In which there has been a congenital arrest of many neurones, especially of the small and medium-sized pyramids in the frontal lobe (amentia, admirably described many years ago by Shaw Bolton), and in which later at puberty or adolescence a wide-spread neuronic degeneration occurs. (2) The degenerative cell process is not associated with any congenital or prepubertal arrest of development.

The glia cell proliferation is general, and occurs especially in regions where the cell degenerative process is most marked. The neuroglia nuclei are pale in colour and seen in groups around the degenerated cells, sticking to them or penetrating the cytoplasm. I could see no spider-cells, and only slight evidence of neuroglia fibril formation by Ranke's Victorian blue stain, so characteristic of general paralysis.

The vessels show no changes: there is no perivascular-cell infiltration, nor endothelial proliferation of the capillaries, so characteristic of the meningo-encephalitis of dementia paralytica. Around the small vessels and in the endothelial cells, especially of the frontal lobe, fatty lipid granules are found (see Plate I).

There is little evidence of nerve-fibre atrophy, and sections of the brain stained by the Weigert-Pal method would afford but little explanation of the dementia. Such fibre atrophy or deficiency as occurs can be explained by the destructive decay of the cortical cells or the congenital cell deficiency. The fibre deficiency or atrophy is most apparent in the frontal lobes.

But the amount of fibre atrophy, due to cell destruction in those cases in which the demential symptoms came on first at puberty or in early adolescence, does not show a correspondence as in dementia paralytica. That being the case, we must assign the major part of the fundamental symptoms of dementia præcox to the functionally incapacitated or degenerated neurones. By this I mean the greater part of the neurones are living, but so biochemically altered that a progressive disorder and loss of function results.

My observations show that, besides the morphological changes in the cells affecting the nucleus and the cytoplasm of the cells, which have been described as occurring in the cortex by all the before-mentioned authors, there are, in addition, similar, though not as intense, morphological changes in the basal ganglia, the stem of the brain, the medulla oblongata and in severe cases of the cerebellum, but the cortical cells are most affected.

No author has paid attention, so far as I can find, to the marked nuclear and cytoplasmic changes in the layers of granules (intercalary neurones) of those regions of the cortex where these cells are so aggregated that they can easily be differentiated from the scattered pale nuclei of the neuroglia cells.

The swelling of the nucleus and infolding of the membrane of great numbers of the cells in the cortex, and to a less degree in the other regions of the brain mentioned, are well established, but no author has pointed out that numbers of the nuclei of these cells show, in varying degrees of intensity, a bio-chemical change by the fact that the nucleoli, which in normal cells are stained a deep blue (basi-chromatin) reaction, are stained purple or even reddish pink (oxychromatin reaction). According to Heidenhain this oxychromatin colour with eosin and blue dyes signifies a diminution of organic phosphorus (see Plates). This diminution of organic phosphorus may be associated with diminished function in relation to oxidation processes.

Besides the bio-chemical and morphological changes of the nucleus there are morphological and bio-chemical changes observable in the cytoplasm and its processes. Under a low-power magnification the cortical cells, especially the small and medium-sized pyramids, are seen to have their processes broken off, and the regular linear arrangement into the columns of Meynert may be more or less destroyed according to the advance of the disease.

There may in some cases, owing to congenital deficiency, be small places where the cells are absent. Examined with an oil-immersion normal Nissl granules are seldom seen, even in the large Betz cells or cells of the optic thalamus, corpus striatum, pons and medulla oblongata, but they are seen fairly normal in the anterior horns of the spinal cord.

Generally speaking, the Nissl pattern is not seen in the cells and dendrons, but the cytoplasm and processes are stained a dull, diffuse bluish purple and scattered throughout are vacuoles. These vacuoles are caused by lipid granules, which have been dissolved out in the process of preparation of the sections (see Plates III and V). The cells of the inferior cervical sympathetic ganglion from a recent fatal case of dementia præcox showed abundant lipid granules, so that it is probable that this change may be more or less universal in the nervous system in well-marked cases of this disease. As can be seen, frozen sections stained by Scharlach or Nile blue show the cytoplasm more or less filled with fat-granules (see Plate I). I have already given reasons for supposing that the basophil substance, which is the antecedent of the Nissl granules, is a product of the vital action of the nucleus on the cytoplasm, and the lipid granules are evidence of hypofunction, which, when they are abundant and affect many cells, may be regarded as a pathological process. So that the cells in all the regions mentioned, in all the cases more or less, exhibit direct evidence of hypofunction.

No author hitherto has directly investigated the condition of the intercalary cells, although reasons have been given for supposing that

they play an important part in the formation of the synapse in all systems of neurones and in the cerebellum. Microscopic examination with an oil-immersion of regions of the cortex in which these cells form definite layers visible with a very low magnification, *e.g.*, the ascending parietal or occipital convolutions in the region of the line of Gennari and other areas, shows that these cells are profoundly modified. The nucleus is swollen with pale blue or purple staining, and often pink—indications of a bio-chemical change. The cytoplasm is hardly visible in these stellate neurones of the plexiform (the term used by Cajal and Campbell for the granular layer) layer owing to the swelling of the nucleus; fine vacuoles are, however, seen in it, and when these cells are stained for lipid fine orange-coloured granules are observed in the cytoplasm corresponding to the vacuoles.

Similarly in these cells this reaction constitutes evidence of a hypofunction and deficient oxidation. Having this in mind I felt it would be desirable to see if this failing of the basophil substance could be demonstrable to the naked eye. I took, therefore, three pieces of tissue from three separate brains that had been hardened in formol. I selected the cerebellum because its structure is uniform, and therefore comparisons would be more reliable.

Portions of the cortex of the lateral lobe of a case of tetanus, a case of senile dementia, which showed by the usual staining methods marked changes similar but more extensive than dementia præcox, and a case of dementia præcox were taken. These were washed free of formalin and simultaneously passed through the various processes for blocking in paraffin. The three pieces in one block were cut simultaneously, the sections containing the three tissues were placed on cover-glasses, stained and mounted, so that the conditions in no way varied for each section. The granules of the tetanus case were stained much deeper blue than were the sections of the brains of the two cases of dementia. There is a possible fallacy in the fact that the length of time and the fixing fluid were not the same.

This observation, in conjunction with the previous microscopic observations, points to a deficiency of basophil substance and a diminution of the organic phosphorus in the cells of the brain of dementia præcox—a fact which may be correlated with the evidence of a failure of nuclear phosphorus in the reproductive organs. Further observations by chemical analysis of the cerebellum in dementia præcox and normal are in progress.

METABOLISM IN DEMENTIA PRÆCOX.

Pighini has carefully studied metabolism in dementia præcox. He gives the following summary of his results:

“With a view of throwing light on the metabolic change associated

with the profound symptoms of dementia præcox, I have selected four typical cases of the disease in the acute and eight in the more advanced stage, and in them I have studied the various food elements by means of numerous analyses of the food administered and the excretions. Each case gave results of interest, which may be summarised as follows :

“(1) In the dementia præcox of Kraepelin the acute phase and the advanced phase each present different modifications of altered metabolism.

“(2) In the acute phase, as evidenced by motor restlessness, sitophobia, violent impulsiveness, slight elevation of temperature, etc., there is a negative balance (increased excretion) of nitrogen (urea, uric acid, xanthin bases) of phosphorus and sulphur, indicative of a marked dissolution of the phosphorised and sulphurised proteids of the organism.

“(3) In the advanced phase, as evinced by dementia, negativism, tics, grimaces, katatonia, etc., there is a proportionate retention of phosphorus and nitrogen, a loss of sulphur proportionate to these elements, and an independent loss of calcium.

“(4) In the two phases investigated there is an altered water metabolism and a relaxed excretion of chlorine.”

The great difficulties attending chemical analyses of the brain and the many sources of error in estimating metabolism in this class of patients make one careful in drawing conclusions. Still, such evidence as exists supports the view that there is a deficiency in the oxidation processes in the brain. Seeing that the microscopic investigations related tend to prove that the oxidation processes are deficient, these findings support the general premises deduced.

THE CORRELATION OF THE MORPHOLOGICAL MICRO-CHEMICAL AND CHEMICAL INVESTIGATION OF THE BRAIN AND REPRODUCTIVE ORGANS WITH THE FUNDAMENTAL CLINICAL SYMPTOMS.

A certain number of cases of dementia præcox occur in congenital aments or imbeciles. These might be termed “dementia præcossissima,” and from early childhood there are clinical indications of a failure of the higher neural functions. It is quite probable that not only the brain is affected by a developmental deficiency, but that there is a general deficiency of the *élan vitale* (vital impulse), and this is manifested by the reproductive organs at puberty, which either fail to develop, or an early arrest of spermatogenesis occurs. In this connection it is interesting to note that I have shown a complete arrest of development of spermatogenesis in several cases of imbecility, also a regressive atrophy and failure of development.

Cases in which clinical symptoms first manifest themselves at puberty

or early adolescence exhibit a progressive failure of the *élan vitale*, which may be correlated with the regressive atrophy of the testes and ovaries—organs in which it can be easily demonstrated that productive energy is most active. But the active nuclear proliferation continually going on in the testes and ovaries is a synthetic process requiring active oxidation processes to build up a complex organic phosphorus compound, protamin nucleinate, out of simple phosphorised lipid substances. The fact that these synthetic processes rapidly fail points to a germinal defect.

There is also evidence of germinal defect in the brain, for many cases of dementia præcox are congenital aments, as shown by the fact that a number of the higher cortical neurones do not develop.

The fundamental clinical disorders of dementia præcox are a weakening of judgment, of attention, of mental activity, and of creative ability, dulling of emotional interest and loss of energy; lastly, a loosening of the inner unity of the psychic life. Now if we assume that the neuron changes show (1) a progressive *suspension* of function of some neurones associated with (2) such intense bio-chemical and morphological changes in other neurones as to indicate *suppression* of function, we are able to explain remission or partial remission of some of the symptoms and sudden changes from stupor to impulsive behaviour.

Suspension of neuron function due to hypofunction from defective oxidation processes or caused by auto- or hetero-toxic conditions may vary in intensity and degree, but *suppression* of function owing to germinal lack of durability is incapable of any remission, but is progressive, so that even when a remission of some of the symptoms occurs there is a residuum of weak-mindedness—*dementia simplex*—which is progressive and continuous. It should be mentioned that the neurones are in the normal individual permanent cells adapted for a prolonged life, and protected by special anatomical conditions from injury and disease. Any form of stress, using the term in the wide sense employed by Mercier, will contribute to lower the durability of the neurones.

Now it is known that some cases which at first clinically appear to be cases of dementia præcox recover. But some cases of confusional insanity may present a clinical picture of dementia præcox and recover completely. It must be supposed that these cases are due to a hypofunction, and we should probably find a general condition of lipid granules in the neurones, with basophil chromatolysis and disappearance, or partial disappearance, of the Nissl granules.

But evidence of a biochemical and morphological degeneration of the nucleus points to a condition which would end in suppression of function, although this condition does not necessarily imply death of the neurone and atrophy of the axon. The morphological changes

implying *suppression* of function are found especially in the cortex, and particularly the cortex of the frontal lobes, in which neuroglia proliferation is most marked. Associated with this are universal changes in the various regions of the brain pointing to hypofunction, *viz.*, lipoid granules in the cytoplasm, and in many cells an oxychromatin, or a tendency to an oxychromatin reaction of the nucleus.

The affection of the stellate intercalary cells which enter into the synapse, and the evidence I have adduced of the importance of these cells in connection with oxidation processes productive of neural energy and transmission of nervous impulses, suggest that a hypofunction or suspension of function of these neurones would lead to synaptic dissociation, and thereby account for psychic dissociation and the coming and going of symptoms ; or where there is a permanent morbid change, to a suppression of their function with permanent dissociation.

We have thus two morphological conditions which will account for the fundamental disorders, and the nature of these disorders will depend upon the cerebral structures affected, whether in such a way as to produce suppression or suspension of function. Naturally the nature of the mental disorders will also depend upon the localisation and the relative intensity of the hypofunction, suspension, or suppression of function of the neurones.

It is quite probable that there is a hypofunction of the whole of the bodily tissues, especially of the reproductive and endocrine systems, and associated with deficient oxidation processes ; there is certainly a diminished vital resistance to microbial infections. A large percentage of these cases of dementia præcox die of tuberculosis, but my observations show that exactly the same neuronie changes can be found in dementia præcox cases that have died of acute pneumonia. So that although it is common to find stupor in patients affected with active tuberculosis, and although the absorption of toxins may therefore have played a part in the production of some of the symptoms, yet I have formed the conclusion that the essential cause of this disease is an inborn germinal defect.

In conclusion I would like to express to you my grateful acknowledgments for so kindly listening to an account of my investigations upon an extremely difficult subject, for I feel that it is one which still requires an enormous amount of patient research before definite conclusions can be arrived at, and the more I work at this subject I am convinced of the wisdom of following the advice of Francis Bacon in his *Advancement of Learning, Divine and Human*, when he says : therefore in this, as in all things practical, we ought to cast up our account, what is in our power and what not ; for the one may be dealt with by way of alteration, and the other by way of application."

The Second Maudsley Lecture. Delivered by Sir FREDERICK MOTT, K.B.E., M.D., LL.D., F.R.S., at the Quarterly Meeting of the Medico-Psychological Association of Great Britain and Ireland, held at the Maudsley Hospital, Denmark Hill, S.E. 5, on Tuesday, June 7th, 1921.

MR. PRESIDENT AND MEMBERS OF THE MEDICO-PSYCHOLOGICAL SOCIETY,—Permit me to thank you for the great honour you have conferred upon me in asking me to give the second Maudsley Lecture ; also for permitting me to deliver it in the Hospital which bears his illustrious name and which owes its existence to his generosity.

I propose to divide this address into two parts : the first will treat of the hospital, its inception and its aims and uses as conceived by the founder ; the second part will deal with researches I have carried on concerning dementia præcox.

I.

THE MAUDSLEY HOSPITAL, PAST AND PRESENT.

It is now fourteen years since the late Dr. Henry Maudsley wrote me a letter saying he would give £30,000 to the London County Council if they would build a hospital in London for the study and investigation of mental disorders in their early stage, and the treatment of such with a view to preventing them being sent to the county asylums. The County Council acknowledged Dr. Maudsley's very generous offer, and the conditions upon which the gift would be made were drawn up by Dr. Maudsley and myself. They were that the hospital should be built within four miles of Charing Cross and be associated with the London University.

Dr. Maudsley recognised that the best and only method for providing means for the cure and prevention of insanity was by the encouragement of clinical and laboratory research, and he conceived the idea that a hospital with 100 beds and out-patient departments would enable a careful study to be made of cases of incipient mental disease, and if connected with the University it would become a centre for post-graduate teaching.

In 1907 I visited Kraepelin's clinic at Munich, and having long been acquainted with the remarkable clinical and anatomical research work which he and Alzheimer had carried on there, and knowing the influence this school had had upon psychiatry in the whole civilised world and Germany in particular, I was not surprised to find that this clinic attracted students and doctors interested in the study of mental

diseases from all countries. There was no such hospital and clinic in England, and in the preface of the third volume of the *Archives of Neurology* (1907) I expressed the following opinions:

"A fruitful field of study in psychiatry would be those early cases of uncertifiable mental affection termed neurasthenia, psychasthenia with obsessions, mild impulsive mania, melancholia, hysteria and hypochondria, which in many instances are really the prodromal stages of a pronounced and permanent mental disorder. The poorer patients suffering with these conditions first come into the hands of the practitioner, the dispensary or infirmary doctor, and the out-patient physician at the general or special hospitals. The better-class patients are sent by the practitioner to the neurologist; the generality of the poorer patients, and sometimes the better-class patients, are regarded by the medical man who has had no training in psychology as of little medical interest (for such patients do not, as a rule, benefit by drugs), and he finds it a wearisome task to listen to their story, to ascertain their inborn tendencies, and to find out the truth of what has happened to account for their strange conduct indicative of their not feeling, thinking and acting in accordance with the general usages of their social surroundings, and yet such patients may not be so antisocial as to be certifiable. Such cases are often in the hopeful and curable stage, and these, if studied carefully by trained medico-psychologists, could not fail to yield valuable results in regard to our knowledge of the causation, prevention and cure of insanity. Moreover, when the cases are followed up systematically they would throw much light on prognosis in similar cases. The majority of cases which are admitted to the asylum have long passed the hopeful stage; still, there are a certain number of early curable cases, and these, I maintain, would sometimes be much better if they had not been certified or sent to associate with chronic lunatics. Fortunate would be the community in which there was a fully-equipped and well-organised psychiatric clinic, under the control of a University, and dedicated to the solution of such problems. If suitable post-graduate training in medico-psychology and neuro-pathology were established, doubtless the Universities and licensing bodies might be induced to establish a diploma, very much on the lines of the Diploma of Public Health, which has largely contributed to raise the science of public health to the high position it now holds, thus conferring an inestimable benefit on the nation."

Shortly after this was published Dr. Maudsley called upon me but I was out, and he wrote me a letter saying that he would give £30,000 to the London County Council if they would build a hospital in London for the study and treatment of acute mental disorders. I interviewed Sir John MacDougall, who advised me to represent to Dr. Maudsley

the desirability of making his gift subject to an association of the hospital with the London University.

In March, 1908, the Asylums' Committee reported as follows: "We desire to express for our own part the appreciation of the generous spirit in which Dr. Maudsley's offer has been made, and our conviction that its acceptance will confer a great and lasting benefit upon a class of sufferers, the effectual assistance of whom has hitherto been amongst the most difficult of social problems."

The offer was accepted by the Council, but for some years both Dr. Maudsley and I were almost in despair as to whether the Council would ever find a suitable site. At last, in 1912, the present site was purchased for £10,000, and plans were drawn up by Mr. Clifford Smith, the asylums' architect and engineer, in which I co-operated. A building strike occurred, and owing to the delay the cost of the building was increased by 25 *per cent*.

The hospital was only partially completed when the war broke out. King's College Hospital and the adjacent schools formed the 4th London General Territorial Hospital, upon the staff of which I served in the rank at first of Major, afterwards as Brevet Lieut.-Colonel, as neurological specialist. To this hospital was sent a large proportion of neurological cases; consequently I suggested to the War Office authorities that if the Maudsley Hospital was completed it would form a very useful addition, and be particularly valuable for the treatment of the more serious cases of war psychoneuroses and psychoses.

Sir Alfred Keogh, D.G., inspected and approved of the hospital, which was completed at the end of 1915, and opened for patients early in 1916 as a part of the 4th London General Hospital.

The Pathological Laboratory at Claybury was dismantled and the equipment transferred to the more convenient and spacious laboratory at the Maudsley Hospital.

I had frequent opportunities of talking over the progress of the building operations, and, when completed and open for the reception of neurological cases, of discussing with Dr. Maudsley the clinical and pathological work that was being carried on there, in all of which he took a great interest.

The Maudsley Hospital now had become widely known, and successive groups of American officers were sent here for training before proceeding abroad. Several distinguished foreigners who were driven from their country were enabled by grants from the Medical Research Council to work in the laboratory. Thus Dr. Sano, formerly the superintendent of the Acute Mental Hospital, Antwerp, and now the Superintendent at Gheel Colony, pursued valuable researches on "The Convolutional Pattern of the Brain in Identical Twins," published in the *Philosophical Transactions of the Royal Society*; "The Convolutional

Pattern of the Brain in Fifteen Pairs of near Relatives," published in the seventh volume of the *Archives of Neurology and Psychiatry*, and "The Description of the Brain of the Idiot Savant of Earlswood," published in the *Journal of Mental Science*. Prof. Marinesco, the distinguished neurologist of Bucharest, investigated "The Histology of Lethargic Encephalitis," "The Oxidase Reaction of the Central Nervous System," and "The Histology of Painful Neuromata in Amputation Stumps," which was published in the *Philosophical Transactions of the Royal Society*.

From the early part of 1915 and onwards I made researches on the brains of cases sent to me from France in connection with the effects of high explosives and gas poisoning, which formed the subject of the Lettsomian Lectures of 1916 and subsequent publications in vol. vii, *Archives of Neurology and Psychiatry*.

The clinical and pathological work which was being carried on here was much appreciated by Dr. Maudsley, and this was shown by a letter which I received from him in July, 1916, in which he says: "I have had two or three casual reports of all that the hospital is doing from visitors, who were very pleased. In getting the hospital on to right lines you are doing good pioneering work which cannot fail to have its reward, and it will depend, as you know I think, on you to make it what it should be; 'therefore be not weary in well doing.'"

Impressed by the lack of knowledge of neurology and psychology by medical officers, and especially in the diagnosis and treatment of the war psycho-neuroses, I started classes of instruction, which were first largely attended, especially by officers from the Dominions and United States; but later, owing to the blighting hand of officialdom, these classes died of inanition. I am glad, however, that I did start these classes of instruction, for it gave me the idea that many qualified medical men were anxious to acquire a knowledge of nervous and mental diseases if suitable courses of instruction were offered to them. I must tell you that the Pathological Laboratory continued to do the routine work for the London asylums during the whole time of the war as well as the pathological work for the hospital. Moreover, a part of the laboratory was utilised for the investigation of malaria by Sergt.-Major Nierenstein, Captain Thomson, and subsequently Capt. Mann. The original work of Sergt.-Major Prof. Nierenstein, of Bristol University, was of very considerable value, and formed the subject of a report on "The Presence of Hæmo-Quinic Acid in the Urine of Cases of 'Blackwater.'"

In September, 1919, the hospital was transferred to the Ministry of Pensions, and in April, 1920, with the approval and under the auspices of the L.C.C., I started classes of lectures and practical instruction for graduates of medicine, especially medical officers of asylums, to enable

them to sit for the Diploma of Psychological Medicine for the University of Cambridge, which had been established just before the war. The syllabus was submitted to Sir Clifford Allbutt and Prof. Sherrington, who was one of the examiners, and received their approval ; it did not quite correspond with that of the Cambridge University. An announcement was made in the journals that this course would be given with a view to preparation for qualified medical men who were desirous of taking the D.P.M. of the University of Cambridge. This caught the attention of the Registrar of the University of London, who wrote asking me if there was not a University of London. My reply was "Yes, but there is no diploma." The Royal Colleges also woke up at this eleventh hour. I may say that thirteen years ago I approached the President of the Royal College of Physicians urging him to support the establishment of a diploma in psychological medicine, but without effect. Possibly the lack of knowledge of neurology and psychological medicine of medical men serving in the Army and on the Pensions' Board and the very serious results which occurred in consequence, both during and after the war, opened the eyes of many of the distinguished heads of the profession who had served in the Army.

Now at last, after thirteen years, I have seen my wishes fulfilled by the establishment of a D.P.M. in more than one University and by the Royal Colleges. I agree with the Medical Correspondent in the *Times*, that attendance at lectures and practical instruction in neurology and psychology for the first part of the Examination for the Diploma, and attendance at the lectures and practical instruction in nervous and mental diseases for the second part of the Examination, is the best corrective to the growth of a superficial and spurious form of psychology which appeals to a certain class of people, whose minds are open to any suggestive influence, and who are ever ready to run after any new craze, good or bad. To such people psycho-analysis appeals. If only this mode of treatment remained in the hands of properly trained medical men well qualified by their personality, their study, knowledge and experience of the character and conduct of their fellow human beings, enabling them to handle the problems of the sexual instinct and its latent manifestations with delicacy and care, it would not matter ; but unfortunately it is getting into the hands of undesirable and unqualified persons.

Since the Laboratory has been under the Ministry of Pensions a number of men have been doing research work here, notably Dr. Golla who is giving the Croonian Lectures this year on "The Objective Study of Neurosis," the following Japanese gentlemen, Dr. Matsumoto, Dr. Morowoka, Dr. Hayao, Dr. Uno, Dr. Kominami, and their work will be published shortly ; also Mr. Kenneth Walker and Dr. Prado y Such. I mention all these names because it shows that

active research has been done, although the Hospital has had no patients since November 1st, 1920. Unfortunately there is no likelihood of the hospital being opened for the purpose for which Dr. Maudsley made his generous gift for some time to come ; consequently a research which I had contemplated on metabolism in dementia præcox, and for which the Board of Control gave me a grant, cannot be carried on.

It will thus be seen that the hospital has fulfilled two out of the three wishes of Dr. Maudsley, namely—practical instruction and lectures in psychological medicine have been given for more than a year. The classes have been well attended by a number of men in the L.C.C. asylums' service and from various parts of Great Britain, and many of them have been enabled to pass the examination for the Diploma for the Universities of Cambridge, London, or that of the Conjoint Board. I have been extremely fortunate in being able to get a first-rate panel of lecturers, and I take this opportunity of thanking them for their services.

They were as follows :

Dr. Golla, who has given lectures on Physiology of the Nervous System and Practical Physiology in Part I of each of the three courses of lectures, as well as Clinical Demonstrations in Neurology in Part II of the First and Second Course.

Dr. Lowson, who gave Lectures on Psychology and Demonstrations in Practical Psychology in Part I of the First Course.

Dr. Hubert Bond, who gave lectures on the Diagnosis, Prognosis and Treatment of Mental Diseases and Demonstrations of Same and Legal Relationships of Insanity for Part II of the First and Second Course.

Sir Bryan Donkin, who gave lectures on Crime and Responsibility for Part II of the First Course.

Dr. F. C. Shrubsall, who lectured and gave demonstrations of cases on the Practical Aspect of Mental Deficiency for Part II of the First and Second Course.

Dr. William MacDougall, who lectured on The Psychology of Conduct for Part II of the First Course.

Dr. Bernard Hart, who lectured on The Psychoneuroses for Part II of the First and Second Course.

Dr. W. C. Sullivan, who lectured on Crime and Insanity for Part II of the Second Course.

Dr. E. Mapother, who lectured on the Symptoms of Mental Disease for Part II of the Second Course.

Dr. Devine, who gave the lectures on Psychology and the Demonstrations on Practical Psychology for Part I of the Second and Third Courses.

I lectured and gave practical instruction and demonstrations on The

Anatomy of the Nervous System for Part I of the First, Second and Third Courses, and lectured on the Pathology of Mental Diseases, including Brain Syphilis, its Symptomatology and Treatment; also gave Clinical Demonstrations in Neurology for Part II of the First and Second Courses.

I should particularly like here and now to express my deep sense of obligation to the Board of Control and the Medical Research Council for the generous way in which they have supported me in grants for carrying on researches in the Laboratory, and by the aid thus afforded enabling me to publish the same with proper illustrations.

Maudsley on Body and Mind.

Before commencing the second part of my address I will quote some passages from Dr. Maudsley's Goulstonian Lectures on "Body and Mind" given fifty years ago, which show that he was fully aware then of the importance of the objective study of the mind and its disorders and the inter-relation of function of body and mind:

"Mental disorders are neither more nor less than nervous disease in which mental symptoms predominate, and their entire separation from other nervous diseases has been a sad hindrance to progress. No doubt it is right that mental derangements should have, as they often require, the special appliances of an asylum, but it is certainly not right that the separation which is necessary for treatment should reach to their pathology and to the method of its study. So long as this is the case we shall labour in vain to get exact scientific ideas concerning their causation, their pathology and their treatment.

"Clearing then the question as completely as possible from the haze which metaphysics has cast around it, let us ask—How comes idiocy or insanity? What is the scientific meaning of them?"

Yet at the present day we find many authorities attributing mental disorders to psychogenic causes instead of to pathogenic conditions. It has been my endeavour to show that mental processes are subordinate to physiological processes and that mental disorders and diseases are due to pathological physiogenic conditions, and I am sure that in doing so and in encouraging research on those lines I shall be clearly following out Maudsley's wishes. In these same lectures Maudsley emphasises the importance that the generative organs have upon the mind, and he asks the question whether each of the internal organs has not also a special effect, giving rise to particular feelings with their sympathetic ideas. But this was long before our knowledge of the endocrine system; still, he shows by his reference to the sexual organs what an important influence they have upon the mind in health and disease, as the following passages show:

"We have indeed to note and bear in mind how often sexual ideas

and feelings arise and display themselves in all sorts of insanity, and how they connect themselves with ideas which in a normal mental state have no known relation to them, so that it seems as inexplicable that a virtuous person should ever have learnt as it is distressing that she should manifest so much obscenity of thought and feeling!

“Considering, too, what an important agent in the evolution of mind the sexual feeling is, how much of thought, feeling and energy it remotely inspires, there is less cause for wonder at the naked intervention of its simple impulses, in the phenomena of mania, when co-ordination of function is abolished in its supreme centres and the mind resolved as it were into its primitive animal elements. The reciprocal influence of mind on organ and organ on mind is well illustrated in the sex organs.

“The morbid self-feeling that has its root in the sexual system is not unapt to take a religious guise.”

II.

FURTHER RESEARCHES ON DEMENTIA PRÆCOX.

Throughout Maudsley's writings, which extend over fifty years, one finds that he views mind and its disorders from a broad biological aspect, and one of his sayings is: “Nature is unmindful of the individual, mindful only of the species.”

Natural selection and the survival of the fittest is still going on whereby weak types are eliminated, and should the social conditions be such as to prevent this natural selection and survival of the fittest, racial decay must inevitably set in.

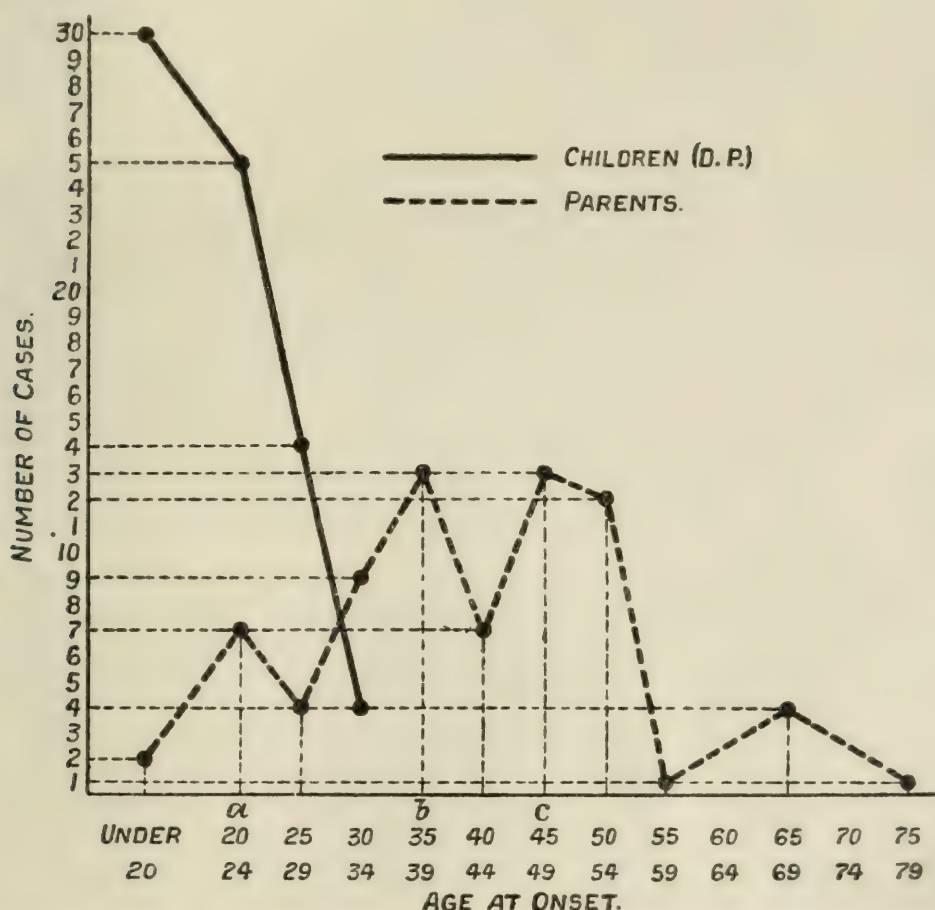
Impressed by the teaching of Morel, who in 1859 pointed out that the progressive uninterrupted transmission of a neuropathic type leads finally to special degenerative forms, to imbecility and idiocy, and with the diminished capability of production of the latter kind the stock gradually becomes extinct, Maudsley says that Nature always tends to end or mend a degenerated stock. This dictum received proof from my investigations on anticipation.

Anticipation and Survival of the Fittest.

In 1911 I published statistical data relating to the age of onset of insane offspring and of insane parents. This was based upon a card system relating to 3,118 relatives who had been admitted to the London County asylums and made up from 14,050 families. This analysis showed a singular tendency to the occurrence of insanity at an earlier age in the offspring than in the parents.

In 1917 I made a further analysis of the relative cards since 1911—a

period of six years. This analysis was limited to insane parents of offspring of which a diagnosis of dementia præcox was made. The graph is similar in its characteristics with regard to the graphs of the age of onset of the parents, but in respect to the age of onset of the offspring, instead of 47·9 *per cent.*, as in the first analysis, being under twenty-five upon admission, 75 *per cent.* of the cases suffering with dementia præcox were under the age of twenty-five on admission.



The curve of the parents resembles very much the general curve of the asylum cases with three periods of greater intensity: adolescence (*a*); G. P. period (*b*); involutional period (*c*).

No cases of dementia præcox were among the parents, and this agrees with Rudin's investigations. Seeing that a great many cases were either insane before certification or by their conduct had given prodromal evidence of oncoming insanity, it is probable that all the cases commenced before the termination of the adolescent period of life. This fact supports Maudsley's contention that there is a tendency to end or mend a degenerated stock. Now, how could Nature otherwise act, in ending or mending a degenerated neuropathic stock, except

by bringing disease on at an early age, by which the organ of external relation, the brain, becomes diseased, and thus renders an individual so affected unable to compete with his fellows in the struggle for existence? Clearly such a condition of a disordered mind would operate by natural selection in the struggle for existence and survival of the fittest among primitive people; but among civilised people, where the struggle for existence and survival of the fittest does not eliminate poor types but rather tends to preserve them, other than natural methods must be adopted, *viz.*, segregation. Fortunately, cases of dementia præcox sooner or later become anti-social and are sent to asylums, where they are usually detained for the rest of their lives.

But my investigations on the reproductive organs of both sexes in this disease show that Nature has adopted an even more certain method of eliminating this form of degeneracy in a stock, *viz.*, by progressive regressive atrophy of the testis and ovary. In the cases of females this regressive atrophy not infrequently occurs after the first pregnancy, and all the evidence goes to show a lack of the psycho-physical energy connected with the sex instinct—an instinct which energises and dominates all the cells of the body for the purpose of the preservation of the species. This lack of psychophysical energy is one of the striking features of this disease, and it shows it both in disordered mental and bodily functions.

In my Morison Lectures and in *Studies of the Pathology of Dementia Præcox*, I have pointed out the intimate correlation of the sex organs and the endocrine system. Naturally the mental symptoms develop progressively, and show themselves first by a disintegration of the psychic unity affecting the highest of the psycho-physiological levels. It might be argued that the degeneration of the sexual organs was secondary to the mental deterioration, and that the mental deterioration was of psychogenic origin, but I have given reasons which I shall develop a little more fully later why this is not the cause.

COMPARISON OF AN ACQUIRED DISEASE (GENERAL PARALYSIS) WITH DEMENTIA PRÆCOX, AN INBORN GERMINAL DISEASE.

A comparison of the mental and bodily conditions of an acquired disease—general paralysis of the insane—with the mental and bodily conditions found in dementia præcox, will be the argument which I should advance to show that dementia præcox is a vital defect of the reproductive organs and of the brain, in particular, and probably of the whole body.

The Testes and Spermatogenesis in General Paralysis and Dementia Præcox.

If we compare the reproductive organs in general paralysis with those of dementia præcox, we shall observe that in the most advanced cases of dementia paralytica portions of the testes, sometimes the whole testes, show signs of active spermatogenesis, and this applies to general paralysis, due to congenital as well as acquired syphilis. Indeed I have found in a case of tabo-paralysis, due to congenital syphilis, live spermatozoa in the vesiculæ eight hours after death. If we compare the average weight of the testes in eighteen cases of general paralysis after removal of the tunica vaginalis and epididymis, with the average weight of the testes from a similar number of cases of dementia præcox, we shall find that in the former the average weight of the organ was 18 grm. and in the latter 12. Moreover, this is in spite of the fact that in cases of general paralysis there was evidence of chronic inflammation with adhesion of the tunica vaginalis, so that sometimes one organ was considerably atrophied. In no case did we fail to find spermatozoa in the vesicular fluid or in an emulsion of the testes in general paralysis; whereas in dementia præcox in considerably more than half the cases no evidence of spermatozoa could be found. On section of the organs in dementia præcox the spermatic tubules may appear white, owing to the lipid contained in them, but this does not always show that the organs on microscopic examination will present normal histological appearances, for reasons which I will state later. Generally speaking, however, especially in more advanced cases and those testes weighing 12 grm. or less, the tubules to the naked eye, or when examined with a hand lens, appear attenuated and of a greyish or greyish-white colour, instead of milky white, and there is obviously in these cases an increase of interstitial tissue.

Whereas on the one hand in general paralysis, especially in organs where a number of tubules have been atrophied, owing to local specific gonorrhœal or syphilitic inflammatory reaction causing obstruction to the vasa efferentia, the hormone interstitial cells of Leydig are clearly seen upon microscopic examination; on the other hand, in dementia præcox these hormone cells are difficult to observe and sometimes impossible to find. There can be no shadow of doubt about the existence of a progressive regressive atrophy of the testes in the majority of the cases of dementia præcox. Generally the atrophy is proportional to the number of years or the early age at which the disease first became manifest; but there were a few cases in which the testes appeared to be of average weight, and in which active spermatogenesis could be found on microscopic examination and in which spermatozoa were found in the vesiculæ. I shall deal with these

in the demonstrations which I shall give at the end of the lecture when I refer more particularly to the recent researches which I have been making with Dr. Prado y Such by a special technique.

The Ovaries in General Paralysis and Dementia Præcox.

Now when we come to compare the ovaries of the cases of general paralysis with those of cases of dementia præcox the subject becomes more difficult in one way and easier in another. It becomes more difficult to estimate the respective average weights, because in most of the paralytic women who have died the process of involution of the reproductive organs has commenced.

There have been, however, a few cases of congenital syphilis causing the juvenile form, and these present a striking difference to those of cases of dementia præcox as regards the appearance of the ovaries upon section. In the former one observes maturing Graafian follicles, whereas in the latter these are not observed. In a general paralytic woman from acquired syphilis there are usually large numbers of *corpora lutea vera* whereas in dementia præcox there are relatively few, even when the disease has affected married women. On microscopic examination one seldom sees in cases of dementia præcox any evidence of primordial follicles showing any tendency to develop a zona granulosa, and still more rarely to form even the early stages of a Graafian follicle, whereas normal follicles in all stages of development may be found in cases of paralytic dementia, whether due to acquired or congenital syphilis, and in spite of long mental disease and bodily intercurrent disease of the same nature, as proved fatal in the cases of dementia præcox. As a general rule if the patient suffering with general paralysis has died before the involutional period, one finds on microscopic examination abundant evidence of maturation of the primordial follicles with the formation of atretic follicles and corpora atretica. These maturing follicles do not go on to a complete ripe Graafian follicle because of the mental and bodily disease from which the patients are suffering, and in this respect differing from the male paralytic, in which, as I have said, active living spermatozoa exist. Now this seems to prove that the acquired disease—general paralysis—has not affected the specific vital energy of the ovum, and this fact may be correlated with the fact that in the testes, even in advanced general paralysis which has lasted many years, we still find evidence of productive energy by the existence of active spermatogenesis.

Sexual Organs and Psychophysical Energy.

The question then arises: What is the cause of this failure of vital energy, and what influence has it on the body as a whole

and on the production of the mental symptoms? There is evidence to show that the organs of reproduction play an important part in regulating and controlling the functions of the endocrine system.

I have not time to develop this part of the subject, but there are many facts which support this statement; but it may be asked: What relation has this regressive atrophy of the reproductive organs which are dominant in the life of internal relation upon the central nervous system which controls all sensori-motor activities? From a broad biological standpoint it may be assumed that after puberty the psychophysical energy of the whole body is expended in response to the three primal instincts—self-preservation, propagation and the herd instinct, which last has arisen out of the first two. If sexual desire is lost one great source of psychophysical energy dries up and this must lead to an increasing development of the self-regarding sentiment, because nearly all the passions and altruistic sentiments have their roots in the instinct of propagation and the tender emotions connected with the care and nutrition of the offspring. But it may be argued that the mental symptoms precede the loss of function of the sexual glands, and therefore, while one will not admit that the pathological physiogenic conditions are secondary to the psychogenic, one cannot avoid an explanation of why the mental symptoms precede the loss of the sexual activity. The explanation, to my mind, is that in this disease there is a failure of vital energy of the cells of the whole body, manifested especially in the two most important to show symptoms, namely the closely inter-related sexual organs and the brain, and particularly in that part of the brain which constitutes the highest psycho-physiological level; the level which has been the last to come phylogenetically and ontogenetically and is the first to go. For this reason I am doubtful whether cases of dementia præcox can benefit from psycho-analysis.

Comparison of the Pathological Changes in the Nervous System in Relation to Symptoms in General Paralysis and Dementia Præcox.

It may be argued by those who are in favour of the psychogenic origin of dementia præcox that the pathological changes found in the nervous system are insufficient to account for the mental symptoms which occur in this disease. I believe that there is sufficient to account for the symptoms if we regard the disease from a physiological point of view. It is quite obvious that the gross changes which are met with in dementia paralytica, changes involving the destruction of the neural elements proportional to, and accountable for, the degree of paresis and dementia which are met with, do not exist in dementia præcox. In this disease the naked-eye appearances are those of a normal brain. There are no inflammatory changes in the vessels;

no thickening of the membranes; no wasting of the brain substance with corresponding increase of cerebro-spinal fluid such as is found in paralytica dementia. Whatever the physiogenic cause, then, it can only be found by microscopic examination.

Neural Activity Dependent upon Physiological Processes and Evidence of their Failure in Dementia Præcox.

Now, it has been known for a long time that there are microscopic changes affecting particularly the nucleus with diminution of the Nissl substance, distortion and shrinking of the cells of the brain, associated with a lipoid degeneration of the cytoplasm affecting especially the higher levels, but not limited to any part of the brain in dementia præcox (*vide* Plate X). How can we then, it may be asked, associate these anatomical findings with a disorder and loss of function of the neuron systems to account for the symptoms? It is difficult, but there seems to me to be evidence in the decay of the nucleus of a failure in the specific vital energy of the neurons. Now what part does the nucleus play in the function of the neuron, and how is it related to the Nissl substance? The Nissl substance, as MacCallum has shown, is a nucleo-proteid containing phosphorus and iron. The Nissl granules do not exist in the living cell, but there must be this nucleo-proteid present in another form; the larger the cell the more abundant it is. This is evidence to show that this basophile staining nucleo-proteid has a specific biochemical function. We know that experiments involving fatigue cause a disappearance of the Nissl substance, which indicates that functional neuron activity is dependent upon it. Now Marinesco has shown that upon all the processes of the dendrons and the cell body there are oxidase granules, but none on the axon. These granules consist of a lipoid substance containing an unsaturated fatty acid substance on the surface, which takes up molecular oxygen (O_2) from the blood. The iron and probably the phosphorus contained in the basophile (Nissl) substance of the cell which is also found in the dendrites, and not on the axon, would therefore act as a catalase on this molecular oxygen and convert it into free atomic oxygen ($O-O$). When the stimulus comes to the neuron it may not cause a response, but as a result of a succession of stimuli—that is, summation—the resistance in the grey matter at the synaptic junctions is overcome and the stimulus is perceived. This may be explained by the fact that an insufficiency of catalase has been formed by the first wave of stimulus to bring about changes in the synaptic junctions to enable it to pass through to the receptor centres.

Experiments and observations show that neural function depends upon the circulating blood carrying oxygen to the tissues. Thus Mosso

found that a patient who had been trephined, and in whom the pulsation of the brain could be felt, lost consciousness six seconds after the pulsation had been made to cease in consequence of compression of the carotid arteries. The blood supply of the grey matter is six times as great as that of the white matter, and there is reason to believe that all the active oxidation processes take place in the grey matter. Moreover, delay in passage of an impulse is in the grey matter. Whereas neuronc fatigue occurs from over-stimulation in the cell and its dendrons, where the oxidase granules are situated and where the oxygen is essential for functional activity; experiments show that the axon, the conducting agent of a nerve-fibre, is incapable of being fatigued by stimulation even when contained in an atmosphere of nitrogen. The stimulus conducted along the axon is therefore biophysical, but in the cell and dendrons, under the influence of a stimulus, it may be assumed nuclear catalase is liberated and acts upon the oxidase granules in the grey matter, converting molecular O_2 into $O-O$, whereby a vital bio-chemical process is set up in which $O-O$ is used up and CO_2 produced. This vital process engendered by the impulse is necessary for its transmission through the synapse to the next neuron. The precise nature of this vital process we do not know; it may be of an amoeboid nature, or an alteration of the surface tension at the synaptic junction. In a neuronc system there are two sets of neurons in the chain—neurons of the first type of Golgi, in which the axon leaves the grey matter and is covered with myelin, and neurons of the second type in which the axon does not leave the grey matter, so that the intercalary neurons of the second type always enter into the synapse. As these consist largely of nucleus, it follows that there is abundance of catalase available at the synapse to convert the molecular oxygen into free atomic oxygen. In the cortex of the brain these intercalary neurons form definite layers of granules, and act as receptors for afferent projection systems and association systems of neurons, well exemplified by the double layer of granules in the half vision centres. Marinesco found abundant oxidase granules in this layer of granules (plexiform cells of Cajal).

If, then, we can assume that neural activity depends upon the physiological processes in the grey matter, which I have indicated, then it is a rational hypothesis to put forward that the failure of function in dementia præcox may be correlated with a failure of oxidation processes in the grey matter, owing to a deficiency of the vital energy of the nucleus, as shown by morphological and bio-chemical changes in the nucleus and a failure in the production of the substance which is the antecedent of the Nissl granules.

The lipid granules which are found in the cytoplasm in dementia præcox and senilis are an expression of a deficient metabolism of the

neuron (*vide* Plate XI). Similar appearances are found in the neurons of old people and old animals; and we may regard the change as it occurs in dementia præcox as a wide-spread loss of vitality and premature decay affecting the cells of the highest physiological levels first, but occurring at all levels. Although the neurons when so affected cannot function normally and dissociation of systems of the highest evolutionary levels occurs, the neurons are not necessarily dead, there is a suspension of function of some and suppression of function of others according to the degree of intensity of the nuclear decay. I have dealt at fuller length in the Morison Lectures upon this theory of failure of neuronic activity.

Recent Observations on the Histology of the Testes and Ovaries in Dementia Præcox.

At the last meeting of this Society I gave a demonstration of the "Histological Changes in the Reproductive Organs in Health and Disease," and I pointed out that there were three or four cases of dementia præcox in which I had found active spermatogenesis and several in which the macroscopic appearances might have passed for normal. A very pertinent question was put by a member regarding these cases. Why should the testes appear normal and active spermatogenesis be found in some cases of dementia præcox if this disease is associated with a germinal deficiency causing a regressive atrophy? I replied that every case that is diagnosed clinically as dementia præcox is not necessarily a case of that disease, especially if it be a case of relatively short duration as regards mental symptoms, as these cases were. But the case in which I had the greatest difficulty to show any regressive atrophic change was one that had been diagnosed dementia præcox by a very skilled and competent authority, so that it was necessary to find another explanation, and this is the one I will offer. Every pathological process which is of a primary progressive nature must have a beginning, and the technique which I at first employed may not have been sufficiently refined to show the earliest changes. Dr. Prado y Such (a pupil of Ramon y Cajal), a worker in this laboratory, has co-operated with me in a further research to demonstrate the finer histological changes by a special silver method of staining of frozen sections of tissues impregnated with gelatine, so as to hold all the delicate structures together *in situ*. We have been able by adopting this technique to show changes in these earliest cases where there is no loss of weight of the organs and normal naked-eye appearance and further upon microscopic examination showed active spermatogenesis. Sections of the testis of a young man who died of infective endocarditis were prepared and stained by the same method for comparison.

The Various Stages of Regressive Atrophy of the Testes.

I will throw on the screen lantern-slides showing on one side the normal, on the other the three stages met with in dementia præcox (*vide* Plates II–VII). It will be observed that even in the earliest first stage a commencing regressive atrophy can be seen, for some of the tubules are beginning to shrink; there is a crinkling of the membrana propria; the tubules are not so closely approximated as in the normal and there is a corresponding increase of connective tissue; there is a greater abundance of lipid granules in the Sertoli cells; the spermatogenesis is not so active and the spermatozoa are not so numerous. Under an oil-immersion many of the spermatids and spermatozoa seem to be ill-formed and tend to be stained with the acid rather than the basic dye (*vide* Plate I).

In the second stage there is a complete or almost complete arrest of spermatogenesis, but many of the tubules still contain spermatogonia and spermatocytes and even spermatids; the cells of Sertoli contain abundant lipid granules; the basement membrane is greatly thickened and there is excess of interstitial tissue.

In the third stage the tubules are very small; there is a complete or almost complete disappearance of the spermatogenic cells, the only cells remaining being the Sertoli cells, which may or may not contain coarse lipid granules and droplets. The interstitial tissue is often dense and always increased; it contains a variable amount of lipid.

The most interesting stage is the first, and Dr. Such and I are continuing our researches in order to see if it is possible to determine the earliest phase of this progressive decay of the germ-cells in the formation of the spermatozoa in the spermatids. So far as I am aware no account exists of the normal process in the human subject. We shall look for changes in the centrosome, in the mitochondria and in the archiplasm that forms the head of the spermatozoon. But the difficulties, as you may imagine, are great to detect pathological changes in bodies lying in the spermatids, which themselves are no larger than a red blood-corpuscle; moreover, the spermatids exist in unlimited numbers. Yet in respect to the testis this is a fundamental proposition which requires answering in order to prove how it comes to pass that there is a primary failure in the specific energy of the nuclear substance of the male germ-cell. The fact that the Sertoli syncytial or nurse-cells contain abundance of lipid in testes where there is a failure of spermatogenesis indicates that this failure is not due to a lack of the raw material, but that the spermatogenic cells are unable to utilise this phosphorised lipid ester by exhibiting evidence of a formative capacity to build up fresh nuclear substance.

The Pathological Changes in the Ovaries in Dementia Præcox.

In the ovary, where the primitive follicles are in limited numbers, the condition of the germinal vesicle and germinal spot (nucleus and

nucleolus) in respect to the chromosomes and chromatin network can be studied comparatively in the normal and in dementia præcox much more easily than in the testes.

Our preliminary investigations show that in dementia præcox the nucleus of the ovum in the primordial follicles is deficient in the chromatin network ; the nucleus is swollen, often irregular in outline, and the intranuclear network thin and sometimes ruptured, giving the nucleus the appearance of being vacuolated. Not infrequently the nucleolus takes the acid dye more than the basic. The changes are like those seen in the nucleus of the cortical neuron. Not infrequently frozen sections stained with Scharlach and the silver method show fatty degeneration changes of the germinal vesicle. The fatty degeneration of the nucleus of the primordial follicles can be seen even under a low-power magnification. Occasionally a follicle can be seen with its single layer of granule-cells separated from the theca interna, indicative of degeneration of the ovum. When these follicles are examined with an oil-immersion lens it is seen that the ovum is dead or dying, for it does not show the intra-nuclear network ; only the nucleolus is visible, and the remainder of the nucleus consists for the most part of intra-nuclear, coarse and fine lipid granules. I have placed under the microscope sections to illustrate this degenerative change, which is striking when a comparison is made with the appearances presented by the ova contained in the ovary of a young woman who committed suicide (*vide* Plate VIII, fig. 1).

Another interesting fact revealed by this method of staining is, that in the normal ovary around the primitive follicles are abundant fine lipid granules similar to those seen in the Sertoli cells. These same granules can be observed in similarly stained sections of the pituitary gland and between the cubical cells lining the colloid vesicles of the thyroid ; they are probably oxidase granules. In several cases of dementia præcox frozen sections of the ovaries stained in a similar manner we have not found these granules, or, at any rate, far less abundant in the stroma around the primordial follicles. Therefore these preliminary investigations tend to show in the ovary (*vide* Plates VIII and IX) :

(1) A failure of the primordial follicles to mature, even to the extent of a single layer of cells, except rarely, and then not to go beyond a single layer of cells to form a zona granulosa, which is generally separated from the theca interna.

(2) A degeneration of the nucleus.

(3) Replacement by ingrowth of stroma.

There is, I think, then, considerable pathological evidence forthcoming to show that dementia præcox is the result of an inborn germinal deficiency of productive energy of the reproductive organs

associated with a progressive deterioration of psycho-physical energy, the morbid manifestations of which show themselves in the whole body, but especially in the brain, particularly and firstly in its highest evolution level.

CONCLUDING REMARKS.

In conclusion I wish that I had the philosophic understanding and the command of language to express my thoughts as eloquently and lucidly as Dr. Maudsley possessed.

During fifty years his great mind was reflected in numerous classical works, now too little read and appreciated. His essays on Hamlet, Swedenborg and Vital Energy are remarkable efforts of his earliest philosophic literary attainments. I am showing here to-day the MS. of some of his works, and it will be observed how very few are the corrections in his recent great book on *Organic to Human*—a remarkable proof of the logical sequence of thought he possessed, combined with a remarkably full and accurate memory. His classical work *The Physiology and Pathology of Mind* was subsequently published in separate parts as *The Physiology of Mind* and *The Pathology of Mind*. An eminent American psychiatrist, now dead, told me that Prof. James of Harvard recommended his students to read these two books, and I can assure members of this Association who are not familiar with these works, they will derive, as I have done, much profit from reading and studying them.

I had the privilege of knowing Dr. Maudsley personally for the last ten years of his life. I had many opportunities of conversing with him on most subjects. I was always struck by his remarkable insight into the characters and conditions of men; he did not suffer fools gladly, not even clever fools, and he had an especial contempt for all that was shallow and superficial. His thoughts, like his writings, were tinged with pessimism and the vanity of things human. Hid beneath a hypercritical and often cynical exterior was a very kind and affectionate nature, which was readily touched by the real suffering of others.

Maudsley received no titular honour. Nevertheless it was recognised by those who knew, and it is that which matters, that he belonged to an "order of merit" that will not perish and be forgotten. His contributions to medical science and philosophy and the foundation of this hospital will, aided by this lectureship, keep his memory ever green. It can be truly said of Henry Maudsley—

"Exegi monumenta aere perennius."

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FIG. 1.—A, Normal spermatozoa from vesicula seminalis from a case of manic-depressive insanity; B, degenerated spermatozoa from vesicula seminalis of a case of dementia præcox. Second stage. Hæmatoxylin eosin. (Magnification 600.)

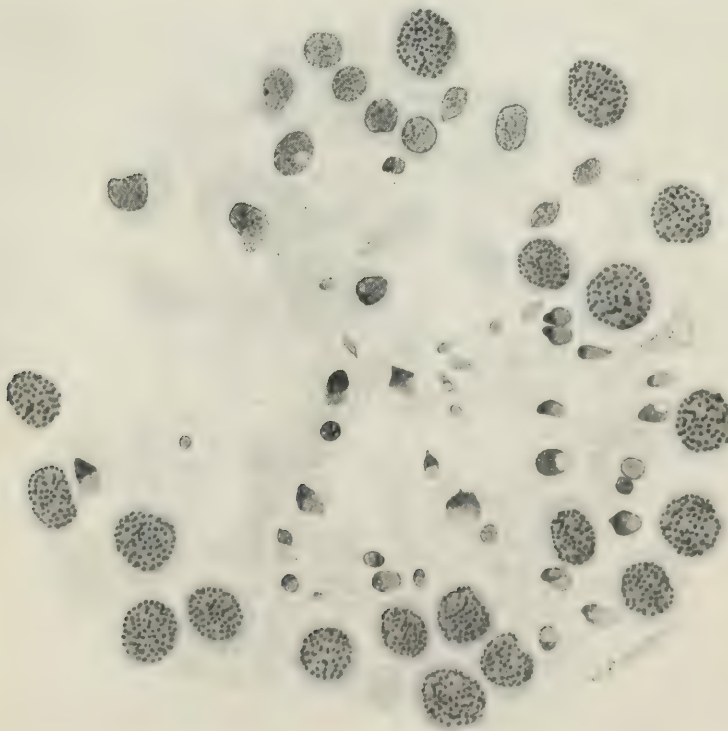


FIG. 2.—Section of seminiferous tubule stained by hæmatoxylin and eosin from the testicle of a case of dementia præcox of less than two years' duration. The large nucleated cells are spermatocytes; the smaller bodies are spermatids or spermatozoa. Observe the varying size and shape, instead of being oval or of a lance-head form. Some are vacuolated; others, especially the smaller, are stained entirely by the acid dye instead of the basic. There does not appear to be a normal spermatid or spermatozoon in this section of the tubule. (Magnification 600.)

To illustrate Morison and Maudsley Lectures by Sir FREDERICK MOTT.

FIG. 1.

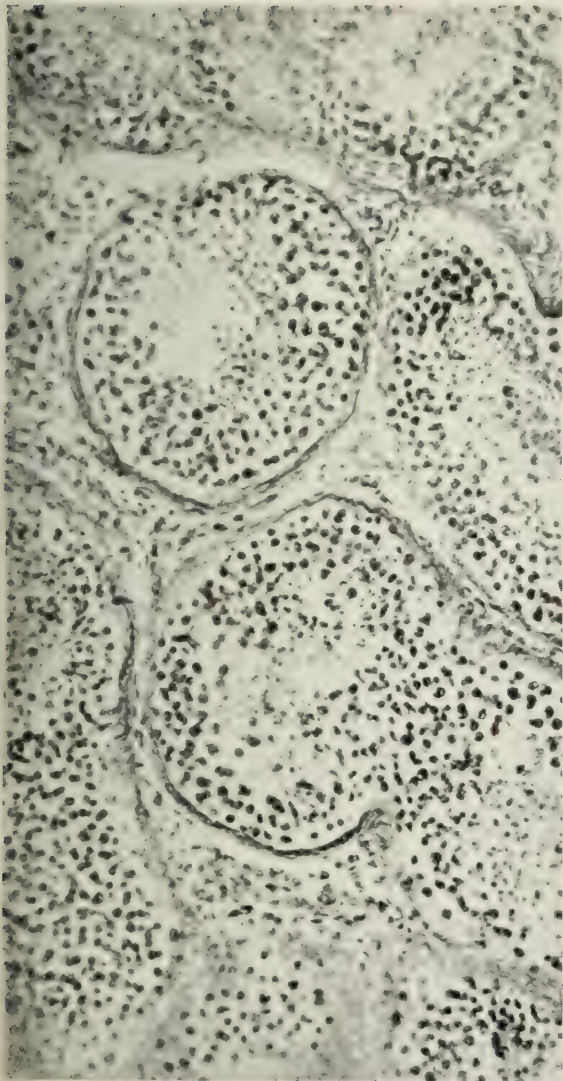


FIG. 2.

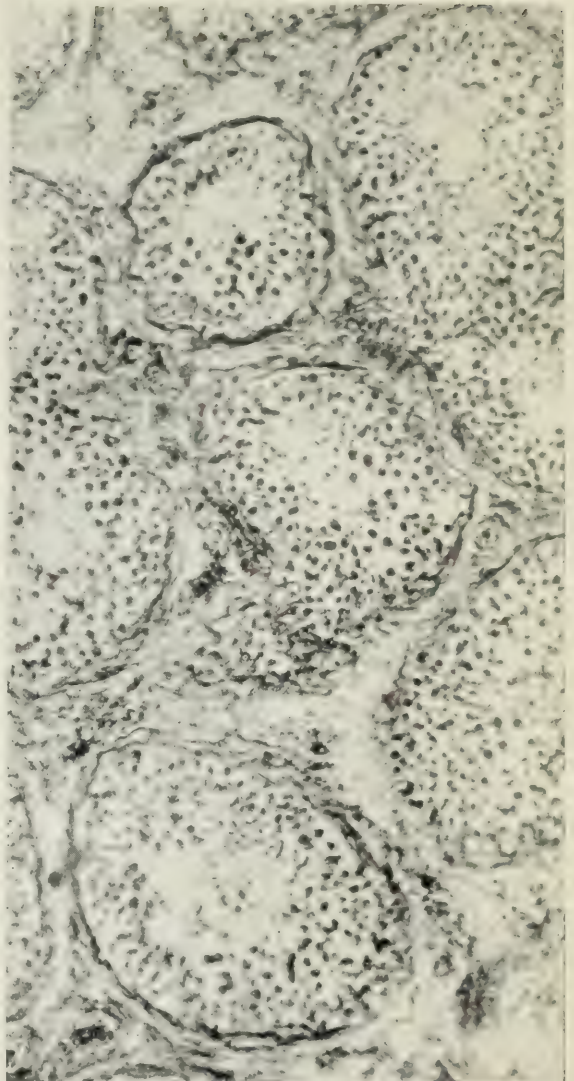


FIG. 1.—Section of normal testicle of youth *æ*t. 21, who died of infective endocarditis. Shows the normal testis with active spermatogenesis.

FIG. 2.—Section of testis of F. A. E—, *æ*t. 26. Dementia *præ*cox. Mental symptoms twenty-two months. Death from dysentery. Testes weighed each 19 grm.; normal naked-eye appearance. Shows the very earliest stage with some evidence of interstitial tissue and diminution of spermatogenesis.

To illustrate Morison and Maudsley Lectures by Sir FREDERICK MOTT.

FIG. 3.

FIG 4.

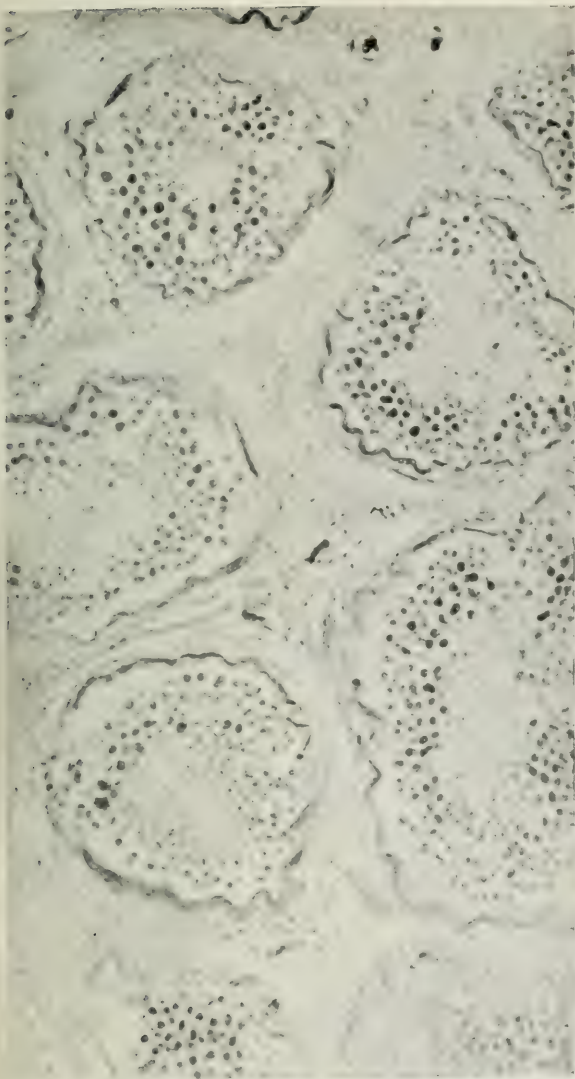


FIG 3.—Section of testis of E. T—, æt. 19. Twenty-three months' duration of mental symptoms. Testes 19 and 16 grm. each. Abundant spermatozoa in vesiculæ seminales, many degenerated. Exhibits a later stage of regressive atrophy in which spermatogenesis is still active, but there is a deficiency of spermatogenic cells, increase of interstitial tissue, with shrinking of the tubules and thickening and crinkling of the basement-membrane.

FIG. 4.—Section of testis of W. H—. Soldier discharged after two years three months' service; then delinquencies of various kinds. Admitted to Long Grove Asylum, June, 1918, æt. 20. Death from lobar pneumonia seventeen months after admission. Testes—weight, 13·8 grm. right; 15·8 left. Arrest of spermatogenesis with shrinking of the tubules, thickening and crinkling of the basement membrane.

To illustrate Morison and Maudsley Lectures by Sir FREDERICK MOTT.

FIG. 5.

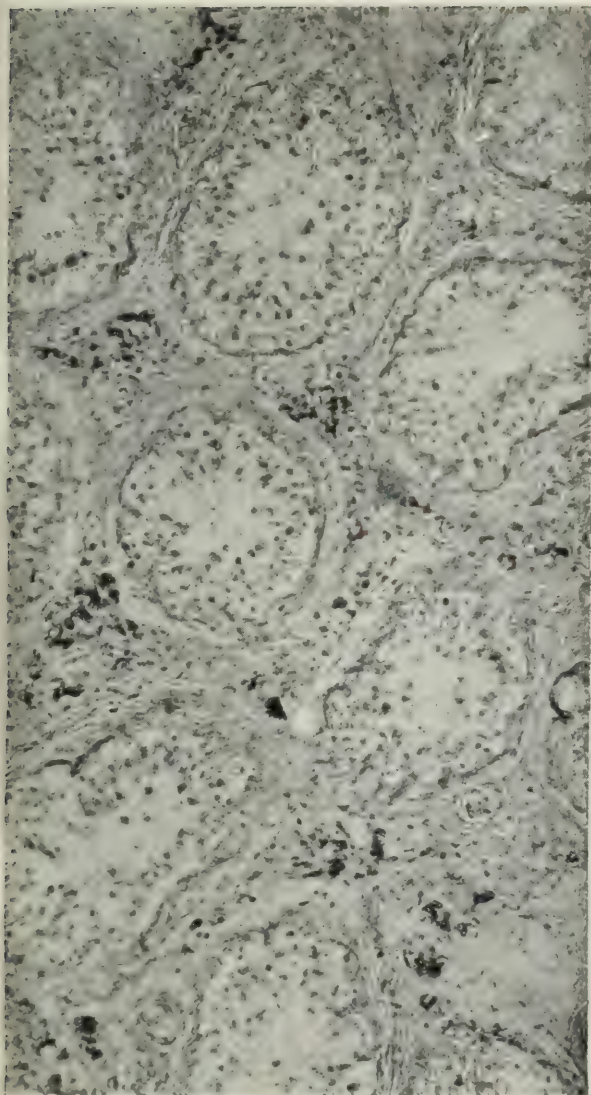


FIG. 6.

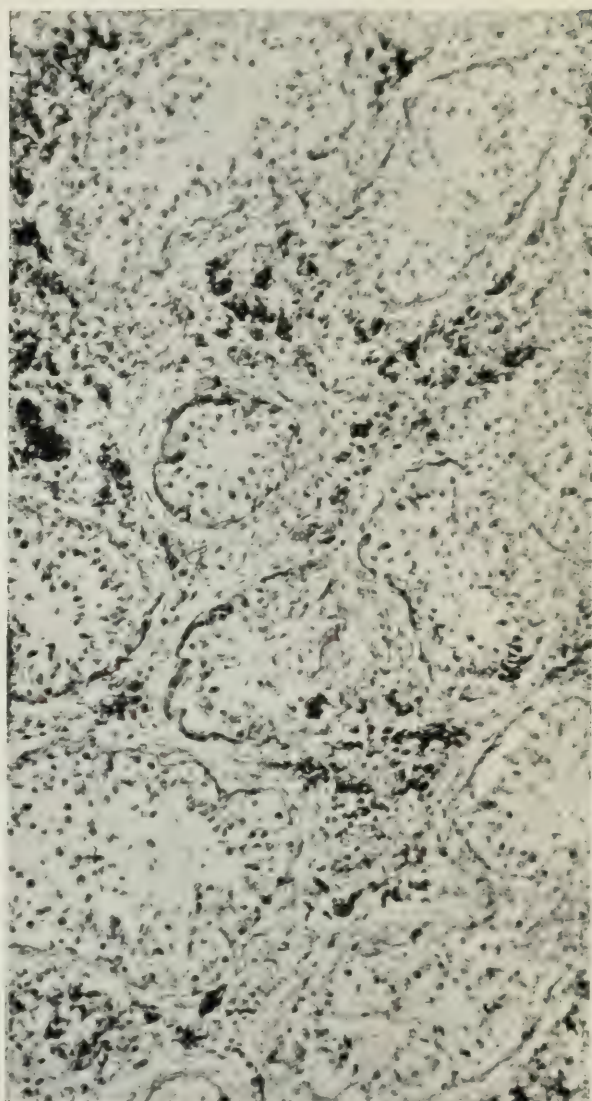


FIG. 5.—J. S. C—: age at death, 29; admitted at the age of 24. Testes 10 gm. each. Complete arrest of spermatogenesis, shrinking of the tubules, very marked diminution of spermatogenic cells. Great increase of interstitial tissue, thickening and crinkling of basement-membrane.

FIG. 6.—P. H—, æt. 17 years 6 months onset of mental symptoms. Admitted to asylum at age of 18; died æt. 20 of pulmonary tuberculosis. Testes each 9 gm. Final stage of regressive atrophy: Tubules much shrunken, only contain Sertoli cells with lipoid granules contained in them; marked thickening of basement-membrane and dense fibrosis of interstitial tissue.

Magnification of all these photo-micrographs on Plates II, III and IV is 150. These sections were stained by the special silver method of del Rio Hortego. A full account of this method and of the clinical histories of them and many other cases will be published by Dr. Prado y Such and myself shortly.

To illustrate Morison and Maudsley Lectures by Sir FREDERICK MOTT.

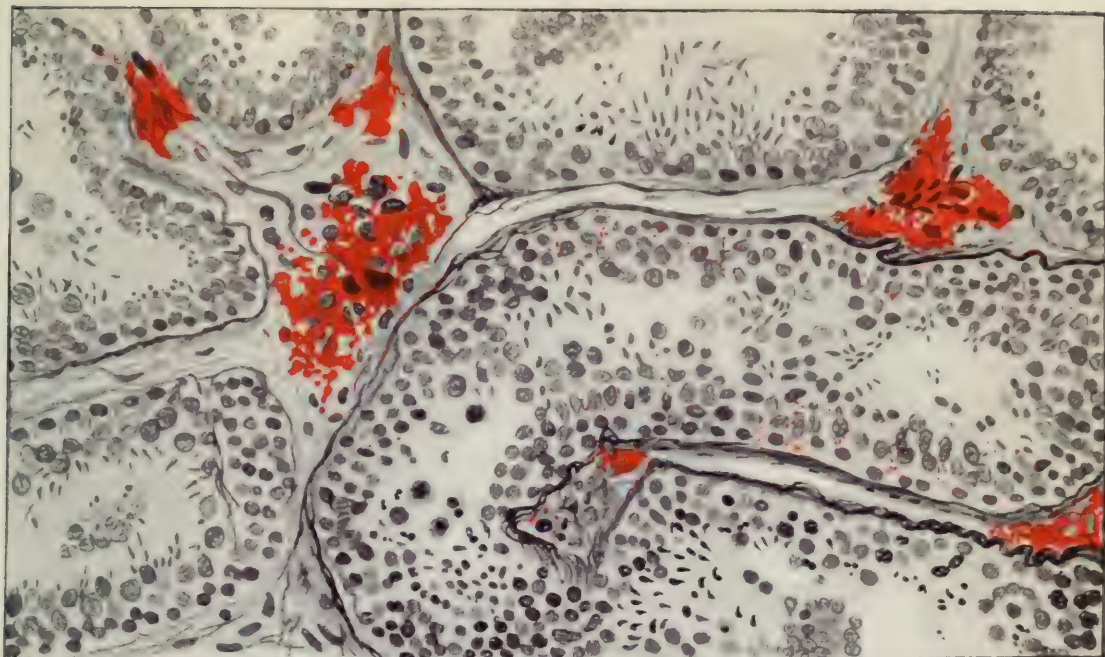


FIG. 1.—Section of normal testis stained by scharlach and del Rio Hortego silver method. Observe the active spermatogenesis and the relatively small amount of lipoid granules the Sertoli cells. Abundance of lipoid in the interstitial tissue.

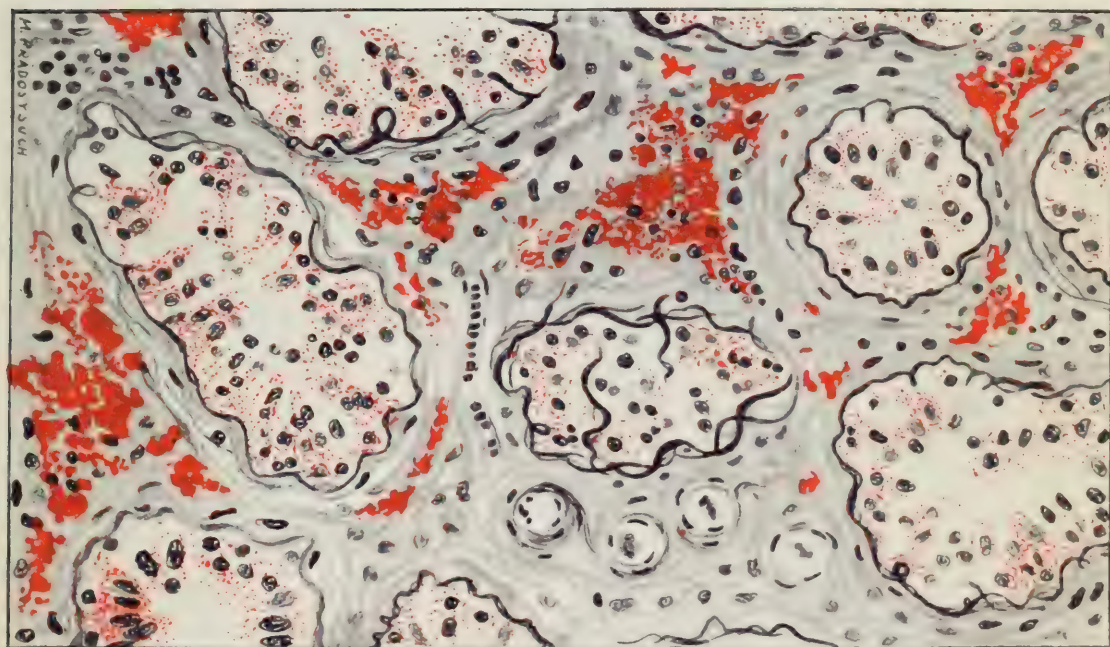
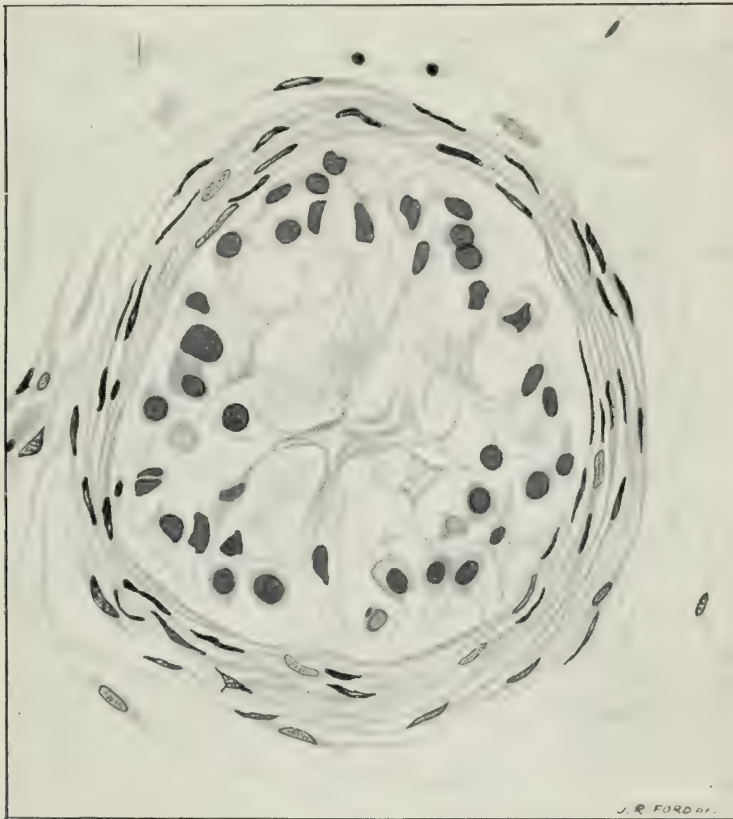


FIG. 2.—Section of testis of J. S. C— (fig. 5, Plate IV). Observe the complete arrest of spermatogenesis, atrophied tubules and increase of interstitial tissue with lipoid. The Sertoli cells contain numbers of fine lipoid granules.

To illustrate Morison and Maudsley Lectures by Sir FREDERICK MOTT.



Third stage of testicular regressive atrophy. Section of right testis (weight, 12 grm.), cut by freezing microtome after fixation in formalin. Stained with scharlach R and hæmatoxylin (*vide* footnote, Plate VII).

FIG. 1.—There is a great increase of the interstitial tissue; no interstitial cells are seen. The tubules are shrunken; the basement-membrane is greatly thickened; there is no sign of spermatogenesis; the lipoid granules are only present in the interior of the tubules. Magnification 115.

To illustrate Morison and Maudsley Lectures by Sir FREDERICK MOTT.



FIG. 2.—A section of tubule magnified 420 times. The basement-membrane is greatly thickened; there is no sign of spermatozoa, spermatocytes or spermatids; the nuclei of the spermatogenic cells show no signs of mitosis. The lipoid granules, coarse and fine, are contained in the Sertoli cells or between them in the sustentacular framework. They are not the fine, orange-stained granules, and some of them are a product of fatty degeneration of the spermatogenic cells.

For account of this case see Case 10: dementia præcox; monorchidism; atrophy of suprarenal on side of absent testis. "Studies in the Pathology of Dementia Præcox," *Proc. Roy. Soc. Med.*, 1920, vol. xiii (Section of Psychiatry), pp. 34-37.

To illustrate Morison and Maudsley Lectures by Sir FREDERICK MOTT.

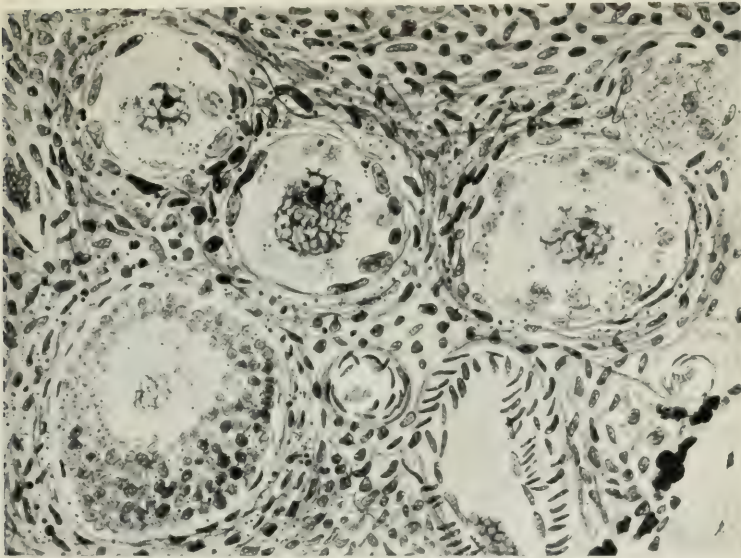


FIG. 1.—Frozen section of ovary of a young woman who committed suicide. Stained by special silver method and scharlach. This shows primordial follicles containing ova with a well-marked chromatin network of the nuclei and surrounding granulosa cells. The largest follicle is not cut through the centre and shows active proliferation of the granulosa cells. The interstitial cells with many nuclei are seen, and scattered about in the tissue are numbers of black (in section red) granules of lipid—presumably oxidase granules.

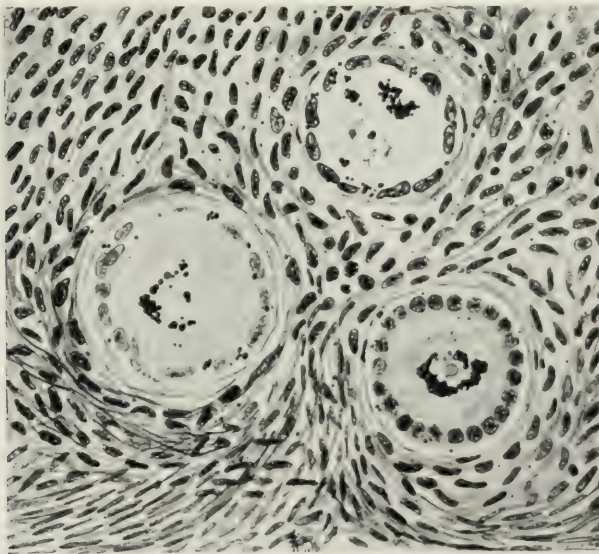
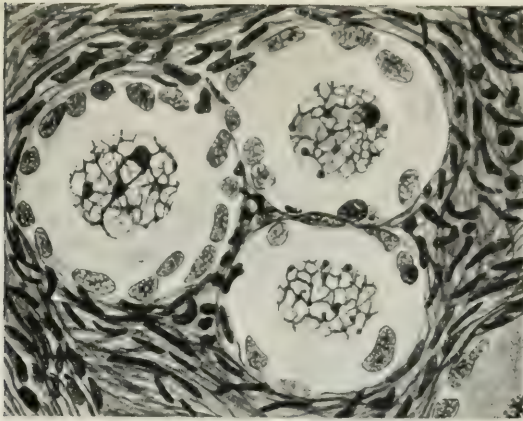


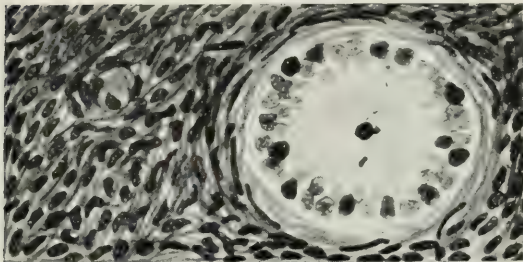
FIG. 2.—Frozen section of ovary from a case of dementia præcox stained by special silver and scharlach method. Observe the absence of chromosomes in the nuclei of the ovary and replacement by droplets and coarse granules of lipid stained red but appearing black. Comparatively few oxidase lipid granules are seen in the interstitial tissue.

To illustrate Morison and Maudsley Lectures by Sir FREDERICK MOTT.

A.



B.



C.

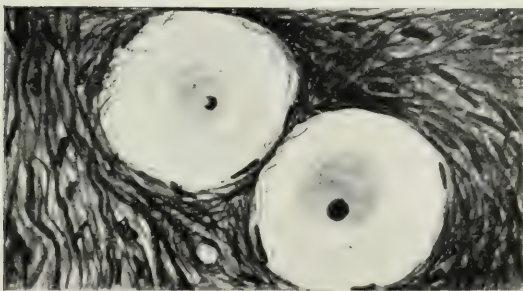


FIG. 3.—Three frozen sections of ovaries stained by silver method to show changes in the primordial follicles.

A. Normal showing three primordial follicles, each showing well-developed chromatin intranuclear network.

B. Primordial follicle from a case of dementia præcox following pregnancy. The nucleus shows nucleolus, but hardly a vestige of intranuclear chromatin. The cells of granulosa layer unequally stained owing to degeneration, enclosed in a theca interna. This follicle is commencing to degenerate owing to a lack of vital energy.

C. Final stage of regressive atrophy of primordial follicles from another case of dementia præcox following pregnancy. The nuclei show no trace of chromatin network, the nucleoli are alone stained; there are no granulosa cells and the interstitial tissue consists of dense fibrous tissue with few nuclei.

Plates VIII and IX are drawings executed by Dr. Prado y Such with an ocular 4 and $\frac{1}{12}$ oil-immersion lens.

To illustrate Maudsley and Morison Lectures by Sir FREDERICK MOTT.

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FIG. 1.—Section of cortex of angular gyrus (Case 1). Degenerated pyramidal cells. Observe the swollen nucleus with intranuclear network. There are no Nissl granules seen, only a purple dust and vacuoles. The nucleolus is stained a reddish purple instead of blue. The neuroglia cells are faintly stained in comparison with the normal. Some of the pyramidal cells are undergoing autolysis, and one shows two neuroglia cells within a hollow space of the cell. Near this is a small stellate cell with greatly swollen nucleus. (Magnification 4, ocular, and $\frac{1}{12}$ oil-immersion.)

To illustrate Morison and Maudsley Lectures by Sir FREDERICK MOTT.

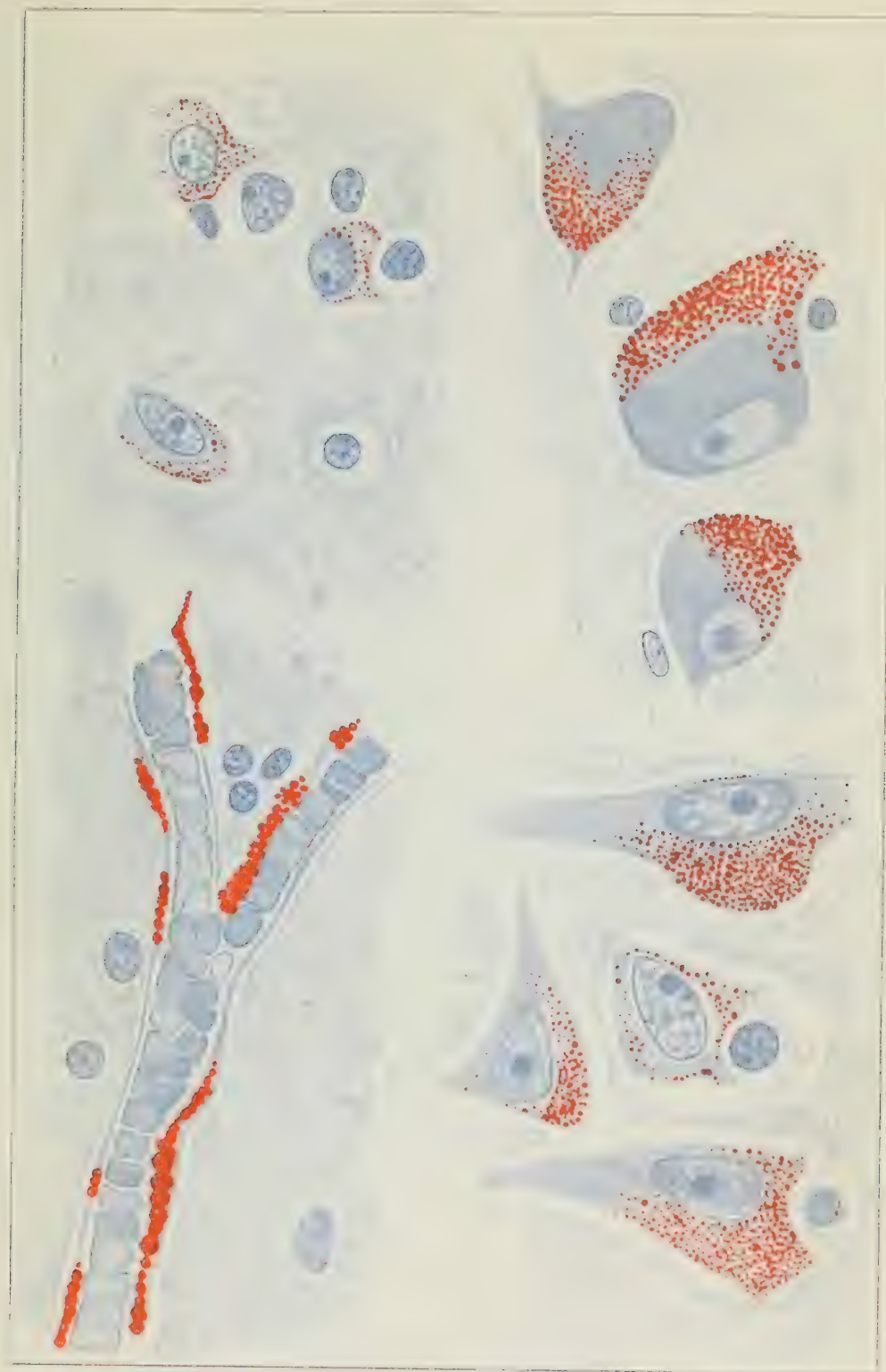


FIG. 2.—Frozen sections of formalin-hardened brain of Case 1, stained with scharlach R and hæmatoxylin mounted in glycerine. To the right are seven large cells of the optic thalamus showing a large number of lipid granules in the cytoplasm. (Magnification 600.) On the left is a capillary with lipid granules in the sheath and in the endothelial cells. Above are three cortical cells with lipid granules and several neuroglia cells. (Magnification 600.)

To illustrate Morison and Maudsley Lectures by Sir FREDERICK MOTT

Idem.—"Studies in the Pathology of Dementia Præcox," *Proc. Roy. Soc. Med.*, vol. xiii, 1920 (Section of Psychiatry), pp. 25-63.

Idem.—"The Changes in the Central Nervous System in Hypothyroidism," *Arch. Neur. and Psych.*, vol. vii, 1918.

Idem.—"Heredity and Insanity," *ibid.*, vol. v, 1911.

Idem.—"A Study of the Neuropathic Inheritance especially in Relation to Insanity," *ibid.*, vol. vi (being an address delivered at the opening of the Henry Phipps' Psychiatric Clinic, Johns Hopkins University, Baltimore, Maryland, U.S.A., April 16th, 1913).

Idem.—"The Application of Physiology and Pathology to the Study of the Mind in Health and Disease," *ibid.*, vol. vii, 1918.

Mott and Brun.—"Microscopic Examination of the Central Nervous System in Three Cases of Spontaneous Hypothyroidism in Relation to a Type of Insanity," *ibid.*, vol. vii, 1918.

Pighini, G.—"The Organic Metabolism in Dementia Præcox," *ibid.*, vol. iv, 1909.

Idem.—"Chemische und biochemische Untersuchungen über das Nervensystem unter normalen und pathologischen Bedingungen: VII Mitteilung, ueber die Autolyse des Nervengewebes I, von Carlo Fontanesi," *Biochem. Zeitschr.*, lxxiii, 1914, p. 337.

Pighini, G., and Barbieri, P.—*Chemische und histochemische Untersuchungen über die Lipoiden Abbaustoffe des Gehirns bei Progressive Paralyse.*

Paton, Noel.—"Nervous Regulators of Metabolism," *Journ. Nerv. and Ment. Dis.*, 1915-1917.

Renaudié, Henri.—*Dementia Præcox Studies: A Contribution to the Study of the Pathological Anatomy of Dementia Præcox.*

Smith, Harper.—"Dementia Præcox," *Arch. Neur. and Psych.*, vol. v, 1911.

Schafer, Sir E. Sharpey.—*Endocrinology.*

Tait, Lawson.—"The Corpus Luteum," *Lancet*, vol. i, 1892, p. 56.

Wada.—*Obersteiner's Arbeiten*, xviii, p. 313.

Part II.—Reviews.

69th Annual Report of the Inspectors of Lunatics (Ireland) for the year 1919.

As would have been expected, the reduction in numbers which had been noted in the immediately preceding years, and which had been attributed to the well-known effects of a prolonged war upon the insane population, has not been fully maintained with the conclusion of the European War. Whereas the reduction during the year 1918 amounted to over 1,000 patients, on this occasion it amounts to but 290, the actual figures being 22,578, which give a proportion of 515 insane persons per 100,000 of the estimated population.

The number of admissions, at 3,956 patients, has risen by 463. The cause of this increase is to be discerned in the fact that the Belfast and Richmond War Hospitals were closed towards the end of the period under review, thus terminating a most useful chapter in the career of the parent institutions under whose care these excellent hospitals had been maintained. The patients who were not considered fit to be discharged have been transferred to the civil asylums under the kindly designation of "service patients."

In connection with the subject of war and its productiveness of mental disease, it is interesting to note that a mere 57 *per cent.* of the insanity occurring amongst civilians during the past five years was attributed to war conditions, and that in but 1.19 *per cent.* did they appear to have had any influence whatever.

Naturally, during the year 1919, owing to the conclusion of hostilities, there had been a big influx of "overseas" cases, but the home service patients showed a diminution, which fact pointed to the unlikelihood that any real increase in the war type of case had taken place. The actual number of soldiers and sailors who had served during the war in an expeditionary force, or on a ship in commission, and who eventually had found their way into mental institutions in Ireland, had jumped from 34 in 1915 to 336 in 1919. The total for the period covered by the years 1915 to 1919 inclusive was 576 "overseas" men and 214 who had not served in this capacity. These figures, however, do not represent the total incidence of mental disease amongst Irishmen on active service in so much as a large number have recovered in the war hospitals.

Returning to the civilian patients in the district and auxiliary hospitals, we find that the principal causes of their alienation have been attributed to heredity in 22 *per cent.* of the admissions, mental stress in 15 *per cent.*, while toxic causes accounted for 14 *per cent.* Of the last named, alcohol and syphilis were responsible for 6.3 *per cent.* and 2.5 *per cent.* respectively. In the large proportion of 22 *per cent.* of the admissions no principal factor could be assigned.

Curiously enough the figures given to represent syphilis as a causation are identical in their total with those for the previous year, but a big difference occurs in those ascribed to the acquired and congenital varieties of the disease. In the returns all patients believed to have

suffered at any time in their lives from the disease are expected to be noted. Taken as a whole the figures for syphilis are of negligible value in elucidating the causation of mental illness in the public institutions of the country. It is, of course, well known that, in respect of the prevalence of venereal disease, Ireland holds an enviable position as compared with the sister countries. At the same time, the very lowness of the figures makes one wonder what would be the number of positive Wassermann reactions were it practicable to have such determined after each and every admission.

The patients who were discharged from the hospitals amounted to 1,976, which figures show an increase of 287 over those for the preceding year.

The recovery-rate works out at 37·8 *per cent.* as calculated upon the admissions, which is an increase of ·4 *per cent.*

Deaths, represented by the figures 1,796, have decreased by 447, giving a 9·3 *per cent.* rate on the daily average number resident. This is 1·8 *per cent.* lower than the rate for 1918. The highest death-rate, now at 24·1—an increase of 4·4 *per cent.*—has passed from a big industrial centre in the north to an area of agriculture and beauty in the south. This result was caused by a very serious outbreak of influenza, which attacked 341 patients and 39 members of the staff, a fatal termination occurring in 43 cases.

As in the previous year the West holds the honour of the lowest death-rate at 5·5 *per cent.*, which compares favourably with the preceding 6·7 *per cent.*

Among the 48 patients who made good their escape, 32 got away from the same institution. This will not be a matter of surprise when it is known that for a period of three months its nursing staff struck work, and by this means left all the responsibility incidental to the care of a helpless community in the hands of a few officials, whose devotion to duty could not entirely negative their deficiency of numbers.

There were only two suicides during the year—one through hanging, and the other from the infliction of a self-injury, which was followed by septic pneumonia. Five deaths occurred from misadventure, and in two cases homicide was the cause.

The total cost of maintaining the public institutions came to £1,023,450, including the repayment of loans, purchase of land and other capital charges, of which the actual maintenance of patients accounted for £939,056. The receipts from public funds are classified under local rates £760,695, Government capitation grant £183,079, and the Government contribution on behalf of criminal lunatics £15,788. The capitation grant of the Government again falls short of the amount certified to be payable, the abatement being at the rate of 11·06 *per cent.* Reasoning from a basis of what obtains in collateral services, there are many public men who hold that the capitation grant should bear 50 *per cent.* of the total cost of maintenance. It cannot be claimed that the State is entirely guiltless in the matter of the vastly increased cost of living. It would, therefore, seem somewhat unfair that this enormously increased cost should fall in its entirety upon the local rates. Strange though it may seem, the amount of the Government grant for the year under review

is, with the exception of the year 1911-12, absolutely the smallest monetary contribution that has been made by the State since the year 1904-5, notwithstanding the very different conditions under which we have been living in recent years.

The average cost of maintenance per patient in the district asylums, as calculated on the gross expenditure, amounts to £51 8s. 11d. per annum. This is an increase of about £9. The net cost at £44 7s. 1d. shows an increase of £8 4s. 6d.

Manic-depressive Insanity and Paranoia. By Prof. EMIL KRAEPELIN; translated by R. MARY BARCLAY, M.A., M.B.; edited by GEORGE M. ROBERTSON, M.D., F.R.C.P.Edin. Edinburgh: E. & S. Livingstone, 1921. Demy 8vo. Pp. 280. Forty-nine illustrations, eighteen in colour. Price 12s. 6d.

This book is a companion to *Dementia Præcox and Paraphrenia*, both being translations from Prof. Kraepelin's *Text-Book of Psychiatry* (eighth German edition) by Dr. Barclay, and edited by Prof. Robertson, of Edinburgh. The translator's work appears to have been admirably done, and for the most part rendered in readable English, though the necessity for using many words which are literal translations of German psychiatric terms will disfigure English translations of Kraepelin's writings until such time as a Maudsley or a Crichton-Browne can be induced to illuminate them, not by a translation, but by a reproduction in scholarly English.

The first section of the book deals with manic-depressive insanity. Kraepelin's conception of mania and melancholia is not expressed to English readers by either of these terms, or by the adoption of the combined term "manic-depressive insanity." In these isles mania and melancholia have always stood respectively for those mental disorders in which the most prominent symptom is morbid excess of the sense of well-being or the contrary, concomitant disorders of intellectual and volitional spheres being secondary considerations in formulating the symptom-complex. Kraepelin holds the view that manic-depressive insanity is a disorder principally affecting "the realm of volition and action"—for example, "pressure of activity" in mania, "inhibition" in melancholia. The "mood" may vary either day by day or for longer periods, though in each attack there is commonly one prevailing mood. When undue pressure of volitional activity is associated with a predominantly exalted and cheerful mood the phase is then described as mania, and similarly the association of inhibition with dejection and gloom as melancholia. Several mixed phases are described as occurring when this association is broken, as when volitional excitement is linked up with depression; or an exalted sense of well-being with stupor, etc. A latterly rather neglected form of mental disorder—delusional mania—appears as a possible phase, and also its parallel, delusional melancholia. Involutional melancholia and many of the cases previously classified as amentia or confusional insanity are now included. In all, Kraepelin separates out four manic states, six depressive states, eight mixed states and four fundamental temperamental states; all are subject to delimitation as expressed by cyclothymia, periodic and alternating insanity, etc.

Thus a very wide range of mental disorders are brought under cover of a comprehensive conception called manic-depressive insanity, a cognomen, though convenient, conveying nothing of the fundamental principles upon which the conception is based.

It is many years ago since it was first observed that the affective state in mania and melancholia was a very varying factor, so much so that a strong suspicion arose in one's mind that they were not separate morbid entities. It was difficult to establish common fundamental states to justify their unity as manifestations of one disorder. The more closely cases were investigated, the more it became apparent that typical cases were rare, the majority presenting many variations in symptomatology. When, some twenty years or more ago, Kraepelin's lectures at the Munich Clinique were first published in English, our difficulties regarding this group of the psychoses seemed to be solved, but a practical application of Kraepelin's hypothesis soon gave rise to almost greater confusion. It was felt, however, that Kraepelin was on the right lines, and that further light would appear in due course. The book before us clarifies the situation considerably, and as a clinical manual covering a considerable bulk of the occurring cases of mental disorder, it should be in the hands of every psychiatric student and practising alienist. Its importance lies not only in the analysis of the symptomatology and prognosis, and the positive facts it adduces, but in its demonstration of how and where our knowledge is lacking. Its further value is that it indicates the lines along which investigations should be continued.

It cannot yet be said that we are any nearer the discovery of any single morbid process underlying the various manifestations of manic-depressive insanity, and until this is revealed Kraepelin's conception must of necessity remain unproven. His latest pronouncement removes some of the difficulties which beset the path of those who have adopted his precepts in actual practice.

The admission of hallucinated and delusional cases in this group of the psychoses was inevitable. The clinical observation of such cases showed that many did not become demented, and that they, from time to time, presented phases of typical maniacal excitement, melancholic retardation, or mixed phases or persistent incoherence of thought which excluded them from either paranoid dementia or paranoia.

Again, acutely hallucinated cases with considerable confusion, especially when there was no known exhaustion or toxæmia, settled down to a typical maniacal or melancholic course, and on the other hand exhausted cases frequently showed unmistakable maniacal or melancholic symptoms with considerable confusion of thought.

It was also no longer possible to maintain involution melancholia as a separate clinical entity. Melancholic retardation was found to occur in involution as frequently as the clinically described involutional melancholia occurred in earlier periods of life. The inclusion of all these cases as phases or types of manic-depressive insanity is fully justified by clinical observations and subsequent historical data.

Many cases are difficult to distinguish from schizophrenia, dementia præcox, amentia, and paraphrenia and *vice-versâ*, which fact can, not unreasonably, be used as an argument against the adoption of the manic-depressive hypothesis. Even years of observation, in some

instances, may fail to clear up the diagnosis. These difficulties, no doubt, are due largely to our ignorance of the nature of the underlying morbid process in manic-depressive insanity, and also to faulty or imperfect clinical observation and incomplete histories. It is fair to assume that with rapidly improving clinical methods and opportunities of observation and investigation there will be fewer doubtful cases.

Kempf, in his recent book on psycho-pathology, remarks that "the results of the intensive study of a large variety of psychotics of many nationalities have forced the abandonment of the Kraepelinian symptomatological classification of psychoses because of its futility for the much more interesting, practical and resourceful conception of uncontrollable autonomic affective cravings originating in autonomic segments opposed by the ego." Kempf's views will in due course, no doubt, be commented upon in a separate review, but here we may remark that few practical alienists, especially after perusal of the work which is the subject of this review, will be content to thus summarily dismiss Kraepelin's teachings, supported as they are by reliable clinical and statistical data. Kraepelin is no psychological visionary but a hard man of facts, with reasoning powers of no mean order, and whose judgment impresses one as being sound—even cautious. At the same time he is not devoid of imagination, but above all he is eminently practical, which fact is stamped upon every page of his writings. To reject Kraepelin's clinical teaching for that of the psychogenetic school would be behaviour akin to that of the dog which lost the bone in favour of the shadow, though no doubt the day will come when something tangible and practical will evolve out of the latter school. At present there is room for both schools, and the proper course is to combine them as help-mates in the elucidation of a most difficult problem. Kraepelin's clinical methods did much to establish the morphological entity of dementia præcox and made possible the genesis of its pathology and morbid anatomy by Mott and others, and there is little doubt but that manic-depressive insanity will in due course be similarly confirmed as a morbid entity by the pathologist and bio-chemist.

Chapter VII is devoted to fundamental states, and is one of the most interesting and instructive in the whole book. We are reminded thereby of Clouston's teachings on this matter and the importance he attached to temperament in the development of affective disorders. Kraepelin says: "Manic-depressive insanity is in general independent of external influences. This fact shows us that the real, the deeper cause of the malady is to be sought in a permanent morbid state, which must also continue to exist in the intervals between the attacks." There is no doubt but that a closer study of cases during these periods would reveal much that is not apparent to the ordinary observer, and bring to light additional evidence that, as in dementia præcox, the roots of the disease will be found in those bio-chemical activities which form the basis of the psychic life.

Kraepelin classifies these fundamental states as the depressive temperament, the manic temperament, and the irritable temperament, and regards them as the rudiments of manic-depressive insanity. They may exist as peculiar forms of the psychic personality throughout life; they may be the points of departure of definite mental attacks; they

may be present during the intervals between attacks, and they may alternate with each other (cyclothymic temperament). This chapter will be of special value to general practitioners.

A study of the statistics reported by Kraepelin regarding the frequency of the individual forms shows that out of 899 cases observed over many years, 440 presented depressive, 149 manic and 310 mixed states. The manic form clearly has the best prognosis, 68 *per cent.* of cases having only one attack. The depressive form is the next favourable, 59 *per cent.* being limited to one attack, while only 34 *per cent.* of those who had one of the mixed forms suffered from a single attack and 37 *per cent.* of the latter form had three or more attacks.

These mixed states are therefore of considerable interest and their recognition clinically of some importance. He goes on to point out that certain observers have described "partial inhibition" and "partial mixtures," and though such undoubtedly occur, yet if all the varying changes that present themselves during the attacks received more accurate consideration, there would be still greater multiplicity of forms. For instance, the continued predominance of a mixture of moods in delirious mania leads to a clinical picture usually called "acute delirious mania" or raving mania. The fundamental state, however, is one of mania. The cheerful or depressive moods are not simple opposites which are mutually exclusive, but may combine with each other in divers ways. Thus a distinction must be made between mixed moods and mixed types of manic-depressive insanity. The important point appears to be the recognition of mixed types than their precise formations, and though Kraepelin describes eight, yet the possible combinations of fundamental states are innumerable.

The various manic states can be clearly followed, and the clinical pictures called up are in agreement with common experience. The same, however, cannot be said of the classification of Kraepelin's depressive states. Some of the types are in essentials so similar that they could with advantage be combined and the groups reduced.

The introductory chapter to the second portion of the book deals with the history of the conception of paranoia—a term first used by Kahlbaum in 1863. The main literature on the subject is quoted in a footnote, where, we are pleased to note, Dr. Percy Smith's masterly review, published in the *Journal* for 1904, finds a place. Kraepelin follows the earlier teaching of Snell, Westphal, and Sander that paranoia is a primary disease of the intellect. He limits his conception of paranoia to cases comprising an insidious development of a permanent and unshakable delusional system resulting from internal causes. It is accompanied by perfect preservation of clear and orderly thinking, willing, and acting. The morbid process is limited to certain circles of ideas, the psychic personality is preserved, and dementia is not developed. He rejects hallucinatory and confusional cases, the acute paranoidias of Westphal, querulants, and all cases of systematised delusions developed from external causes, or associated with definite disorders of the emotional life. There is no doubt that the wider conceptions of paranoia led to the grouping together of a number of cases which, though at some stage clinically similar, were widely divergent as regards their genesis and termination. The slowly-

developing purely intellectual disorder with characteristic fundamental symptoms was lost among a strangely-assorted company of cases of dementia præcox, delusional mania and melancholia, confusional insanity, the alcoholic psychoses and many others, all having as a prominent symptom, at some time or other, delusions mentally worked up into a system.

As to whether Kraepelin's definition is too restrictive opinions differ. Paranoia thus limited is to many of us a rare form of mental disorder, though it is without doubt met with. A broader conception, which would include cases commencing from non-toxic external causes, such as the querulants, and others presenting limited hallucinatory disorders, but which otherwise comply with Kraepelin's definition, would perhaps be more in accordance with clinical experience, and still be exclusive of cases fundamentally belonging to other groups of the psychoses.

Kraepelin, in the various chapters which follow, deals with the subject on much the same plan as adopted in the previous section of the book. Thus the clinical picture, various forms, the course and issue, frequency, cause, delimitation, diagnosis, and treatment are in turn dealt with with the same clearness, close reasoning, and wealth of detail which is characteristic of his writings.

The few points of criticism we have thought fit to make do not in the least detract from the great value of the book and its essential teachings, and we trust that the reception given to this and its companion volume will be such that will encourage Dr. Barclay to essay further sections of Kraepelin's great work until the whole of it, in this very convenient form, is available to English readers.

Prof. Robertson rightly confines himself to a valuable introduction, which is helpful, especially to those studying Kraepelin for the first time.

J. R. LORD.

The Letters of William James. Edited by his son, HENRY JAMES. London: Longmans, Green & Co., 1920. Two vols., medium 8vo. Vol. i, pp. vi + 348, 10 illustrations. Vol. ii, pp. xii + 382, 5 illustrations. Price 42s.

One of the instincts of the animal world is curiosity, and, strange to relate, it increases in proportion as the species rises in the scale of evolution, so that in man we have it at its greatest. It is this instinct which renders information about our fellows of the liveliest interest, and accounts for the fact that most newspapers have a column wherein personal details of men and women are recorded; and is there not a publication called *Mainly About People*?

When a man stands out above the level of the ordinary, any information regarding him becomes all the more desirable, and, when the man in question is a psychologist and one who bases his psychology on introspection, it is imperative from a scientific point of view that we should know what sort of man it was who wrote in this manner. It is for this reason that the letters of William James do more than engage the attention; they are valuable. The title of the book says "letters" only, but the editor has given much more than correspondence, and his notes have made the work practically a "life."

The first question that may reasonably be asked is—"Was James a great man?" It all depends, of course, on the meaning attached to the word "great." His, certainly, was not the greatness of a Jenner or a Lister, which will probably never be forgotten; on the other hand, his influence on contemporary thought was so wide-spread that there can be no doubt he is worthy of the distinction implied in the term. Even now it is impossible to pick up a modern book on psychology without finding therein numerous references to James's *Principles of Psychology*, published in 1890. In some respects he was a pioneer, for he treated the subject of psychology in a manner that was entirely novel, and which more than surprised his older colleagues in this branch of science. Moreover, by his numerous writings, and by his systematic lectures as a Professor at Harvard and the more general occasional ones in different cities and countries, he had a very large following. He certainly stimulated many to take up the study not only of psychology, but of philosophy, and perhaps in some measure prepared the ground for the more practical science of abnormal psychology, which study is so marked a feature of the present age.

William James was descended from North of Ireland Presbyterian stock, which in its turn was probably of Scottish ancestry. His father, Henry James, was a man of independent means. Owing to an accident in his youth, when he was badly burned, one leg was twice amputated above the knee. As a result of this infirmity he was compelled to spend the remainder of his life in towns where the pavements were smooth. He was of a restless disposition, and the family were continually moving from place to place in the States and in Europe. This circumstance naturally interfered with the continuous education of his son, William, who usually dismissed all reference to his schooling with the contemptuous remark that "he never had any." On the other hand he gained a varied amount of instruction, which must have helped in forming the broad outlook on life characteristic of him in his later years.

To return to the father. In his early manhood he studied for the Church at Princeton, but he could not be bound by orthodox opinions, and he left after two years. After this he became for a time sceptical of all systems of religion, but was eventually introduced by a friend to the doctrines of Swedenborg. "By their help he found the relief he needed, and a faith that possessed him ever after with the intensity of revelation." He must have been at times somewhat of a trial to his fellow disciples, for in a letter to the editor of the *New Jerusalem Messenger*, a publication of the sect, the following passage occurs: "I presume its editorials are by you, and while I willingly seized upon every evidence they display of an enlarged spirit, I yet find the general drift of the paper so very poverty-stricken in a spiritual regard, as to make it absolutely the least nutritive reading I know. The old sects are notoriously bad enough, but your sect compares with these very much as a heap of dried cod on Long Wharf in Boston compares with the same fish while still enjoying the freedom of the Atlantic Ocean."

What of the mother? It is distinctly unfortunate that a page only is given up to this subject. "She lived entirely for her husband and children, and they, joking her and teasing her and adoring her, were devoted to her in return." It is a pity that her son Henry has not left

any record of his mother, and when remonstrated with about this, he replied sadly "Oh! my dear Boy—that memory is too sacred!" William James rarely mentioned her after her death, and then always with reverence. "She supplied an element of serenity and discretion to the councils of the family of which they were often in need; and it would not be a mistake to look to her in trying to account for the unusual receptivity of mind and æsthetic sensibility that marked her two older sons."

Another quotation will give an indication of the home life. "Meal times in that pleasant home were exciting. 'The adipose and affectionate Wilky' [William James], as his father called him, would say something, and be instantly corrected or disputed by the little cock-sparrow, Bob, the youngest, but good-naturedly defend his statement, and then Henry (Junior) would emerge from his silence in defence of Wilky. Then Bob would be more impertinently insistent, and Mr. James would advance as Moderator, and William, the eldest, join in. The voice of the Moderator presently would be drowned by the combatants, and he soon came down vigorously into the arena, and when, in the excited argument, the dinner knives might not be absent from eagerly gesticulating hands, dear Mrs. James, more conventional, but bright as well as motherly, would look at me, laughingly reassuring, saying, 'Don't be disturbed; they won't stab each other. This is usual when the boys come home.'" Their parents considered these debates excellent for their children, and no doubt William owed much of his wealth of resource in speech and writing to these early discussions round the table.

Perhaps too much space has been devoted in this review to the account of the parentage and early days of William James, but it is necessary to the understanding of the character and life-work of the man.

William James was born in 1842, in New York. At the age of eighteen he began to study painting, and it seemed as if at one time he might devote all his talents to art, but he soon realised that this was not to be. In 1862 he went as a member of an exhibition to the Amazon with Agassiz, and again he knew that he had not found his true vocation. He studied medicine in Germany in 1867 and 1868, and during this time he was troubled with ill-health. The main symptoms were insomnia, digestive disorders, weakness of the back, and, what was more trying, eye trouble. These were no doubt functional, but none the less disheartening, and after undergoing various "cures" without success he turned his face homewards, and returned to Cambridge (U.S.A.), in November, 1868. He took his degree of M.D. Harvard while still an invalid in 1869, and in 1872 was appointed Instructor in Anatomy and Physiology in Harvard College, where he continued to teach until 1907.

He married in 1878, and the ill-health which had been dogging him disappeared, though he occasionally suffered from sleeplessness. A breakdown in health of a different nature came again when he was fifty-seven. It appears to have been heart weakness caused by overwork, and though he accomplished much he was apparently never again robust, and died in 1910.

And what of the man himself as revealed by his letters? In many respects his life and character were of a contradictory nature, though he himself was anything but a "contrary" man. He was appointed Lecturer in Physiology, yet taught psychology; later on he became Professor of Psychology and taught philosophy. He is probably known to most people as an eminent psychologist; yet he was not so much a psychologist as a philosopher. He certainly did establish a laboratory for practical and experimental psychological work, but one can almost imagine that he gave a sigh of relief when he handed it over to Munsterberg. His own view, as expressed in his letters, on his book *The Principles of Psychology*, must be taken with more than a grain of salt, yet probably there was a good deal of the nature of "half fun, whole earnest" in the following lines. Writing to his publisher, he said: "No one could be more disgusted than I at the sight of the book. No subject is worth being treated of in 1000 pages! Had I ten years more I could re-write it in 500, but as it stands it is this or nothing—a loathsome, distended, tumefied, bloated, dropsical mass, testifying to nothing but two facts: First, that there is no such thing as a *science* of psychology; and second, that W. J. is an incapable." In a letter to his brother, Henry James, on the same subject, he says: "I have written every page four or five times over, and carried it 'on my mind' for nine years past, so you may imagine the relief. . . . As 'Psychologies' go, it is a good one, but psychology is in such an ante-scientific condition that the whole present generation of them is pre-destined to become unreadable, old, mediæval lumber as soon as the first genuine tracks of insight are made."

To continue his contradictions—he was social and loved talking and arguing with a small circle of friends; yet he hated set society functions, as the following quotation will show: "And yet, whenever his wife wisely prepared for a suitable time and made engagements for some sort of hospitality otherwise than by haphazard, it was perversely likely to be the case, when the appointed hour arrived, that James was 'going on his nerves' and in no mood for 'being entertaining.' The most comradely of men, nothing galled him like *having to be sociable*. The 'hollow mockery of our social conventions' would then be described in furious and lurid speech. Luckily the guests were not yet there to hear him. But they did not always get away without catching a glimpse of his state of mind. On one such occasion—an evening reception for his graduate class had been arranged—Mrs. James encountered a young man in the hall whose expression was so perturbed that she asked him what had happened to him. 'I've come in again,' he replied, 'to get my hat. I was trying to find my way to the dining-room when Mr. James swooped at me and said: "Here, Smith, you want to get out of this Hell, don't you? I'll show you how. There!" and before I could answer, he'd popped me out through a back door. But really, I do not want to go!'"

When he was giving his Gifford Lectures in Edinburgh, ill-health required that he should save all his strength for the actual task of delivering the lectures, and not expend any on the social functions in Edinburgh at the time, and he was greatly relieved that he had a reasonable excuse to stay away.

He forgot all about dignity when lecturing; yet never lost his authority with his class, he was so tremendously in earnest.

"James would rise with a peculiar suddenness and make bold and rapid strokes for a diagram on the blackboard. I can remember his abstracted air as he wrestled with some idea, standing by his chair with one foot upon it, elbow on knee, hand to chin. A friend has described a scene at a little class that, in a still earlier year, met in James's own study. In the effort to illustrate he brought out a blackboard. He stood it on a chair and in various other positions, but could not at once write upon it, hold it steady, and keep it in the class's vision. Entirely bent on what he was doing, his efforts resulted at last in his standing it on the floor while he lay down at full length, holding it with one hand, drawing with the other, and continuing the flow of his commentary. I can myself remember how, after one of his lectures on Pragmatism in the Horace Mann Auditorium in New York, being assailed with questions by people who came up to the edge of the platform, he ended by sitting on that edge himself, all in his frock-coat as he was, his feet hanging down, with his usual complete absorption in the subject, and the look of human and mellow consideration which distinguished him at such moments, meeting the thoughts of the inquirers, whose attention also was entirely rivetted."

He was fond of going to Europe for a rest and change, yet when he had been there a short time he was ever longing to be back in his beloved America again.

He had a wonderfully tolerant mind, and would listen to all sorts of cranks patiently so long as they were in earnest, yet could not abide anyone who gave himself airs or pretensions.

It can easily be imagined how his students must have adored him, and his friends valued every line of his letters. He never seemed to suffer from the conservatism of ideas which accompanies advancing years. For example, writing to Bergson, he states, with regard to *Matter and Memory*, "It is a work of exquisite genius. It makes a sort of Copernican revolution as much as Berkeley's *Principles* or Kant's *Critique* did, and will probably, as it gets better and better known, open a new era of philosophical discussion. It fills *my* mind with all sorts of new questions and hypotheses, and brings the old into a most agreeable liquefaction. I thank you from the bottom of my heart."

What would he have thought of Freud? I believe he would have adopted many of Freud's views, as did his friend J. J. Putman. There is only a small reference to the matter in which he says: "I went there for one day in order to see what Freud was like, and met also Jung of Zurich, who professed great esteem for you, and made a very pleasant impression. I hope that Freud and his pupils will push their ideas to their utmost limits, so that we may learn what they are. They can't fail to throw light on human nature; but I confess that he made on me personally the impression of a man obsessed with fixed ideas. I can make nothing in my own case with his dream theories, and obviously 'symbolism' is a most dangerous method." But there is no doubt that he appreciated the value of the theory of the unconscious, for in writing to Sully in 1901 he says: "I seriously believe that the general problem

of the subliminal, as Myers propounds it, promises to be one of the *great* problems, possibly even the greatest problem of psychology."

It is impossible without quoting extensively from his letters to say more about the man, but readers of this article are strongly advised to peruse the letters for themselves, wherein they will find not only instruction but great entertainment.

The question may well be asked: "What about his psychology?" Is a psychological paper ever set which does not contain a question regarding the James-Lange theory of the emotions? One searches in vain for references to these and other similar topics. The name "Lange" and the word "emotion" do not even appear in the index. And then it is remembered that the paper cover of the volumes bears the following words: "A selection from the letters of the late William James covering the period from his boyhood to the time of his death. The great majority of the letters are informal and intimate, while those of a wholly technical or polemic character have not been included."

A feeling of disappointment is inevitable, but perhaps one day this omission may be repaired by the issue of a third volume containing letters on these subjects.

To conclude, no praise can be too great for the manner in which his son has acted as editor. Literary talent is in the James blood, and is apparent in these volumes. Several photographs, and sketches made by James, a useful index and chronological tables and appendices are included, and greatly increase the value of the work.

R. H. STEEN.

Heilung und Entwicklung im Seelenleben (Healing and Development in the Psychic Life). By Dr. ALPHONSE MAEDER. Zürich: Roscher, 1918. 8vo. Pp. 71. Price 3s. 6d. net.

Dr. Maeder is a notable representative of the Swiss school of psycho-analysis. In these lectures, on the significance of psycho-analysis for modern life, delivered during the war to students at Geneva and at Lausanne, and now published in German and in French, he brings forward an interesting exposition of the special doctrines of that school in their wider relations. The author regards these relations as very wide. The old world, he feels, has been overthrown by the insanity of the warring nations. Now, he declares, is the time for psycho-analysis to come in. It has proved its power to heal the individual; it must now prove its power to heal the nations, explaining to them that salvation is not to be attained by destroying each other, but in the free development of the individuality of each nation, in harmony with the whole. "The idea of regeneration—self-healing in the psychic life—governs this work." One fears, however, that that is an idea hardly fashionable as yet among the belligerent nations.

For Dr. Maeder the psycho-analytic movement is a reaction against the prevailing spirit of the nineteenth century. He regards that age as one of mere intellectualism and mechanism, an age of materialism in science and impressionism in art, an age which found its appropriate climax in the Great War. But already the reaction was being prepared. William James and Bergson are here regarded as, above all, the

pioneers of the new movement. Then came Freud, the bearer of regeneration, and now all our problems are in course of solution. "Out of apparent chaos," to quote the concluding sentence of the work, "a brighter and fairer vision of the cosmos will arise; for tragic and suffering mankind there will again be an age of faith." It may be a little disconcerting to some to be told that in connection with psycho-analysis "mention must also be made of Christian science, spiritism, metaphysical investigation, theosophy, and anthroposophy"—whatever that may be.

In an interesting passage Dr. Maeder describes his own conversion to the religious significance of psycho-analysis. It came through the Freudian analysis of his own dreams. He found that some dreams were attempts at the solution, in the form of imagery, of unconscious conflicts, and he found in a succession of cases that the actual course of events confirmed, or rather embodied, the solutions attempted in the dreams. He came to regard dreams as precursors of life, directing the changes of unconscious constellations. He saw that dreams have a teleological function, and then he realised that this function belongs to the whole unconscious life, of which dreams are merely one manifestation. This discovery made a profound impression upon him. His Positivism and his mechanistic conception of life were shattered. He realised the existence of a deeper meaning in life. He found that he had but to look within in order to find there that living force of which Jesus had spoken—"the Way, the Truth, and the Life." A new strength and trust developed within him. Through psycho-analysis he had been brought into immediate contact with what religion and philosophy had, indeed, taught, but life not rendered accessible.

In the first lecture a sketch is given of the development of psycho-analysis as it appears from the standpoint of the Swiss school. The great pioneering part played by Freud is fully recognised, but his work is considered to be limited by the fact that it is mainly analytic, while his recognition of psycho-sexuality, which liberated science from ancient prejudices, was exaggerated into pansexualism. Alfred Adler, an original mind, but of different type and less breadth than Freud, provided a valuable complement to his work. Then the Swiss school, initiated by Prof. Bleuler, came on the scene, and of this Jung soon became the leader. The Swiss school brought experimental methods, with the so-called association experiments, to bear on Freud's results, and made them measurable; they turned their attention to certain psychoses and renewed psychiatry, so that an asylum patient, instead of being merely an object of pity and scientific curiosity, became a human being who could be understood and approached—no longer a chaos, but a labyrinth to which the Ariadne clue had been found; they replaced Freud's narrow conception of psycho-sexuality by that of affectivity and formulated a bio-psychological conception of libido embracing the whole normal and pathological life, especially psychic development; with the Swiss school psycho-analysis became also psycho-synthesis, and Claparède extended it to education and Flournoy to the study of religious and mystical problems. All this, Dr. Maeder declares, we owe to the Swiss school. "Not only from our mountains and lakes, but from the minds and hearts of our people, a stream of regenerating

force is flowing forth, of which humanity is in greater need than ever before."

Throughout these lectures much attention is given to an elaborate comparison between the course of psycho-analysis and Dante's course through the *Divine Comedy*. That is, indeed, their leading idea. By the process of psycho-analysis the soul is led through Hell and Purgatory to Paradise, just as Dante was led in his great poem. Therein we see also the great importance of *Uebertragung*, of the temporary transference of the patient's affection to the physician, which Dr. Maeder regards as essential. The physician occupies the place of Virgil in the *Divine Comedy*; he is the guide. But his part is only temporary, and in the later stages it is taken by that divine Beatrice who has her place in the depths of the patient's own soul.

It will be seen that this little book is not for everyone; but for those who regard psycho-analysis as a new religion it will almost serve as a breviary.

HAVELOCK ELLIS.

The Sex-Complex: A Study of the Relationships of the Internal Secretions to the Female Characteristics and Functions in Health and Disease. By W. BLAIR BELL, B.S., M.D. London: Baillière, Tindall & Cox, 1920. Second Edition, royal 8vo. Pp. xviii + 251. With 61 (7 coloured) plates. Price 21s. net.

The first edition of this valuable work was reviewed in the *Journal* on its appearance in 1916. This new edition (which, the author states, is to be the last) has been revised throughout. The actually increased number of pages is less than twenty, and no important new aspects of the subject have been introduced since the war stopped research work. The actual increase in pages is not, however, a fair index of the amount of revision, which extends to all parts of the work, and is often of a minute character. The page, moreover, is of larger size, and marginal titles have been added to the leading paragraphs, thus facilitating reference. The chief general change in the substance of the work consists in the addition to the study of each gland of a section on the physiological effects of its extracts. It may be noted that the author has systematically eliminated the adjective "endocritic," generally employed in the first edition, usually substituting "hormonopoietic." A desirable hyphen is also inserted in the title of the book. The chapter on "sexual and reproductive psychoses and neuroses" has been more enlarged than any other—indeed, doubled in length—especially by a fuller treatment of menstruation and gestation, no important new points, however, being brought out. The psychological chapter remains still the most unsatisfactory section of the work. The author has made some attempt to justify his position, but one still notes incautious and capricious statements. He would have been better advised to remain within the sphere of the glandular sex-complex, and to leave to the psychologist himself the task of tracing the facts set forth in their bearing on mental phenomena—a task, as is here finally admitted, "intricate and difficult." In any case, however, the book is full of instruction and suggestion for both the psychologist and the psychiatrist.

HAVELOCK ELLIS.

Tagebuch eines Halbwüchsigen Mädchens. Leipzig and Vienna: Internationaler Psychoanalytischer Verlag, 1919. 8vo. Pp. 248. Price 7s. 6d.

A Young Girl's Diary. Translated by Eden and Cedar Paul. London: Allen & Unwin, 1921. 8vo. Pp. 272. Price 12s. 6d. net.

This volume is in the original edition the first of a series of "Quellen-schriften zur Seelischen Entwicklung." It has been published, by the diarist's permission, without any changes in form or substance save such as are necessary to conceal identity. Its intent cannot be better described than in the words of Prof. Freud to the lady who has anonymously edited the book: "The diary is a little jewel. In fact, never before, I think, have we been able to watch in such clearness and veracity this movement of the soul which characterises the girl of our age and culture in the years before puberty. How the feelings develop from childish egoism to social maturity, how the relations to parents and brothers and sisters appear at first, and how they gradually gain seriousness and intimacy, how friendships are spun and broken, how tenderness gropes towards its first objects, and above all, how the secret of the sexual life first vaguely surges up and then takes complete possession of the youthful soul, how this child under the consciousness of sexual knowledge suffers and gradually overcomes that suffering—all this is so charmingly, so naturally, and yet so seriously expressed in these artless sketches that they cannot fail to prove of the greatest interest to educationalists and psychologists."

The value of the book largely lies in the fact that the diarist, as well as her friend Hella, are both completely normal and average examples of the young girl of the professional middle class, without trace of vice or perversion. One is Protestant, the other Catholic, but this makes no visible difference, and the school life and the home life alike of these girls, except in superficial circumstances, is that of their fellows in all lands. The distinction is that here we have, as never before, the self-revelation of the average young girl, the record of all her trivial experiences at home and at school, at work and at play, her ambitions and her curiosities, mental and emotional development, all set down in school-girl fashion, frankly and familiarly, and here reproduced without any omissions.

It is not altogether an easy book to render out of the original, but the accomplished translators have been remarkably successful in reproducing this typical school-girl's careless and slangy and sometimes incorrect manner of writing. The publishers state on the cover that the book is intended for the use of "members of the educational, medical and legal professions only." Such an announcement conveys an unnecessary and undesirable suggestion of danger. It is a book which all parents might read with benefit. The young would have nothing to learn from it.

HAVELOCK ELLIS.

Lunacy in India. By A. W. OVERBECK-WRIGHT, M.D. Psych. Med., M.P.C., D.P.H., Major I.M.S., Superintendent, Lunatic Asylum, Agra, Lecturer on Mental Diseases to King George's Medical College, Lucknow, and to Agra Medical School, Agra. London: Baillière, Tindall & Cox, 1921. Demy 8vo. Pp. x + 406. Price 21s.

This is for the most part a text-book of mental diseases for students and practitioners. Considering where and among whom it will be used, we note in it with interest—(1) the very wide importance attached to toxæmias in the causation of mental disorders, the assertion that katatonia and hebephrenia are due to bacterial toxæmias, and generally the strong leaning towards such views of mental disease as we might conceive would be most congenial to the hæmatological and microbiological preoccupations of tropical medicine; (2) the relative indifference towards the anthropological and humanistic aspects of psychiatry, and especially towards analytical psychology of any kind; and (3) the prominence given to British authorities among those cited. The medico-legal sections are very well written. SYDNEY J. COLE.

Treatment by Hypnotism and Suggestion. By C. LLOYD TUCKEY, M.D. London: Baillière, Tindall & Cox, 1921. Seventh edition. Demy 8vo. Pp. 413 + xiv. Price 21s.

The first edition of this book appeared in 1889, and since then many changes have taken place in the opinion of the public, both medical and lay, with regard to hypnotism. At that time it required a certain amount of courage in a man to proclaim the fact that he was practising in this manner, and he was looked upon by his medical brethren either as being a quack or indulging in a black art. Most people say that it is the war that is to be credited with this broader outlook, but it is certain that even before the war a more tolerant attitude was being shown regarding psycho-therapy in general and hypnotism in particular.

The list of books on hypnotism by British authors is not a long one, and they could be counted on the fingers of one hand. Amongst these Dr. Tuckey's has always held an honourable place. It is probably well known to most of the readers of this Journal, and does not therefore call for any lengthy criticism.

It does not appear that there has been any material alteration in the last edition, with the exception that the chapter on psycho-analysis contributed by Dr. Constance Long has been omitted. This is probably a wise course to adopt, as in the opinion of many psycho-analysis and hypnotism have little in common. In this connection Dr. Tuckey rather contemptuously dismisses the psycho-analytical explanation of hypnotism in a few lines. Whether these views are right or wrong, they are worthy of more extended argument. Chapter II discusses the power of the mind over the body, and we suggest that in another edition it would be well to bring the matter more up-to-date by including modern experiments—for example, those of Cannon, and there are many others. Dr. Percy Allen contributes Chapter XI, entitled "On Treatment by

Suggestion during the War," and it comes as rather a shock to find that nine pages are sufficient for his experiences, and four pages comprise all that the author requires for the same subject.

The headlines of each page repeat the title. It would be well in a future edition to devote one headline to a description of the matter appearing underneath, as is customary in most books at present.

Dr. Tuckey has a pleasant, easy style, if somewhat discursive, and his book will prove interesting and instructive to anyone who desires to undertake the treatment of patients by hypnotism.

Morning Knowledge: A Story of the New Inquisition. By ALLISTAIR SHANNON. London: Longmans, Green & Co., 1920. Demy 8vo. Pp. 366. Price 14s.

The volume begins with a foreword: "Our age is retrospective; it builds us a sepulchre to the fathers, it writes biographies, histories and criticism. The foregoing generations beheld God and Nature face to face: we, through our eyes, why should not we also enjoy an original relation to the Universe? Why should not we have poetry and philosophy of insight and not of tradition, and a religion by a revelation to us, and not a history of others?"—*Emerson*.

The origin of this rather big book is given by the author in the following terms: that a certain number of English officers were detained in Turkey, and two of them, or some of them, found time to hang very heavily. They were treated with a great amount of consideration by their captors, and were allowed a large amount of liberty. One of them, possibly two—for there is a shadow representing No. 2—determined to write a philosophy of their own. This would occupy their time, and also would keep at a distance some of their companions, who were rather bores. The book, therefore, represents the imaginings of two philosophically-minded young fellows, and their relationship to some of the other officers; in fact, the other officers are made foils. So that they consider questions like materialism and theology as if they were represented by some of their colleagues.

The basis of the whole thing can hardly be called agnosticism, for the author has very distinct faith and strong religious feeling, as manifested in the latter part of the book. In the earlier part we have to remember that he is a strong believer in what is represented by the foreword, of seeing Nature directly, and not through the eyes of others. He looks upon the senses as essential factors in the production of intellect and of mind; but he will have the reader to understand that he looks upon them rather as channels than as origins of thought. "With the conception of determined life," he says, "we are in entire disagreement; it is as blind and dangerous as was the doctrine of predestination of souls. Just as that doctrine springs from misconception of God, so yours springs from a misconception of movement. No view is cruder than that it makes matter a *sine quâ non* of the Universe, which makes the existence of mind itself depend upon an almost fortuitous conglomeration of nervous tissues. Now, the hypothesis we adopt enables us to appreciate thoroughly and to relegate to their

appointed places your methods and aims, whereas you but dimly appreciate ours, and scarcely give them any place at all." This, I may say, is in opposition to the materialistic friend who has been considering with him the reality of things and their dependence rather upon thought and feeling than upon material.

The book is full of beautiful writing, and we should have liked to have been able to quote fully from it; but we feel that to do the book justice it must be very carefully read and considered by the individuals for whom it was intended. It is a queer combination of philosophy and religion. It has many of the characteristics which are represented in the clever undergraduate or don connected with one of the older Universities. All such men seem to pass through a stage of doubt and agnosticism. Many of them become most devout followers of ordinary religious thought; and many of them think they have discovered the clue to all knowledge, and that there is a great deal more truth in imagination than in material. In the conversations that are held between the author and his foils many interesting points are brought out, and one must compare some of his chapters with chapters from *The Book of the Revelation of St. John*; also with the works of certain writers on purely imaginative philosophy. These chapters, such as the one entitled "The Four Doors," are extremely interesting, this one especially, following, as it does, that on "The Three Windows," representing the knowledge which is gained purely through the senses.

But it is impossible for us to do justice to the book without considerable quotations, and these we have found it impossible to give. We would only call more particular attention to the fact that the book is full of thought, and that in the end it leads one to believe that the man has passed through a stage of doubt to a great extent, and has passed into one of faith, and that the faith is really an advanced form of Christianity. The book, as I have said, is quite worth perusal, and one would commend it to anyone who has interest enough in philosophy, and also time to master it.

G. H. S.

Part III.—Epitome of Current Literature.

1. Psychology and Psycho-Pathology.

The Infantile Psyche, with Special Reference to Visual Projection. (Brit. Journ. of Psychol., April, 1921.) Forsyth, David.

The visual type of thinking is the more primitive and is alone found in children. The writer finds that visual images are common in childhood in the darkness or when the eyes are closed, and he gives reasons for the children not speaking of them to their elders.

When the visual organ is stimulated a centripetal wave of excitement is transmitted which is registered in the mind as a memorative impression of the excitation. This memory becomes associated with inner (somatic) excitations, and can be subsequently activated from either of

the two directions in which it has established excitatory connections. Where this inner excitement has accumulated and the tension has led to an overflow of energy to the psychical sphere, a visual memory previously linked with this excitement at the time of an earlier experience is revived ; it is seen "in the mind's eye" or as a visual (externally projected) hallucination. It serves as a substitutive feeling of the inner excitement ; its purpose is to realise an unfulfilled desire. The same process is seen when under the stress of ungratified desire a series of hallucinatory images composes a day-dream. The younger children, as these images are projected externally, never doubt that they are seeing real objects. Dissimilar images may be brought together in a single fantastic hallucination, because the emotional excitement may revive several memories simultaneously which have at some previous time established association with this particular emotional tone. This impossible situation is accepted as real. A mind developed in this way is likely, even years later, to see nothing incongruous in fairy tales, myths and legends.

Only in the course of years can the individual differentiate with certainty between the objects which are seen in the outer world and visual memories of these objects. An intermediate stage must be passed through in which the two must often be confounded. Both sensory stimuli coming from the outer world and emotions are forms of physical energy. They are therefore real in the sense of actual being, and the primitive distinction between reality and imagination cannot be maintained. The writer indicates the relation between them by the terms "objective reality" and "psychic reality," of "objective truth" and "psychic truth." Reality to an infant can only mean psychic reality. Freud's pleasure principle represents the quest of psychic truth, the reality principle that of objective truth.

To the infant the wish is enough to change the outer world in response to its own wants and desires. This implies a belief in one's power of influencing the (unknown) forces of Nature according to one's own desires, and this belief is the foundation of the world-wide practice of magic. To both the infant and the primitive mind the object of desire appears as subject to the control of human feeling. Savages hold their spirits and demons to be animated by love or hate. The infantile world similarly confers feelings on its own creation. In general these visions are either pleasant or frightening. In the case where a child is frightened because he sees an ugly old woman near his bed, the sequence of events is : (1) Fear begins to stir in the child ; (2) this activates memories associated with fear ; (3) these impressions are projected ; (4) the hallucination is now regarded as the cause of the fear ; (5) the whole is capped by a false explanation, namely, that the figure is animated by hostile intentions (rationalisation). Rationalisation itself represents a modern persistence of the practice of magic. It, too, aims at subordinating the outer world to inner perceptions.

The importance of the part these visual memories play in shaping and giving direction to the earliest stages of psychical development must be considerable.

C. W. FORSYTH.

Notes on the Analysis of a Case of Melancholia. (*Journ. of Neur. and Psycho-pathol.*, February, 1921.) Carver, A.

The analysis showed that the patient unconsciously identified herself with her husband, and that her self-reproaches were really directed against him. The death of her husband, in her own estimation, deprived her of her standing and comfort in life, and she unconsciously harboured a grudge against him on this account. She spoke of him with exaggerated tenderness and heaped all the abuse upon herself. The relating of the accusations against herself gave her relief rather than causing distress. The writer finds that the underlying factor in melancholia is a failure of re-adaptation to an environment which, owing to a certain deprivation, has been rendered devoid of interest. Individuals with a "sulky" temperament respond to this by a physical and mental inertia, and defend themselves by displacing the reproach from the environment to the ego. There is further an identification of the self with a beloved person who is blamed for having caused the deprivation.

C. W. FORSYTH.

Endocrinal Defects and Mental States. (*Arch. of Neur. and Psychiat.*, August, 1920.) Davis, T. K.

Quotations are given from Kempf's recent article on "The Tonus of Autonomic Segments as Causes of Abnormal Behaviour," which deals with immediate endocrinal effects. "The ascent of man divides the organism into an autonomic apparatus and its projicient apparatus." At birth the former is well-developed and harmonious, the latter poorly co-ordinated. Inter-co-ordination is essential to the mastery of environment; and in its attainment pressure is exerted upon the infant at birth and throughout its life. Dr. Davis further develops this idea in a cursory review. Autonomic disturbances are a feature of endocrine control, and are absent in the individual with perfect endocrinal balance. Endocrinal chemistry conditions the autonomic apparatus, which through the kinæsthetic stream produces the content of consciousness including emotion; in other terms this means personal character. The endocrine factor produces immediate direct chemical fluctuation through the autonomic segments, but also produces static results. The static endocrinological defects are numerous, as "gigantism, dwarfism, physical disproportion of limbs or trunk, acromegalic hands, feet or features, the cretinoid face, a gerodermic skin, status lymphaticus infantilism, excessive facial hypertrichosis in woman, an underslung jaw, disfiguring acne, a falsetto voice in man, a thick distorted neck, thyroid struma, bulging eyes," and others. The author believes so bizarre a list worth consideration as a neglected source of endogenous factors in abnormal mental states. They induce perplexities and feelings of inferiority, and unbalance the psyche. Their valence varies, and their potency according to sex and period of life. What is negligible in the male may overpower the female, as hypertrichosis, or *vice-versâ*, small stature in man. Facial hypertrichosis to the woman is a gnawing worry, and the more so because taboo. Endocrinal defects of function are dependent on the immediate endocrinal influences through the autonomic segments, as well as on static defects

made operative by introspection and worry. Cases in point are the under-developed boy, unable to compete in the normal pursuits of his fellows, *e.g.*, sports; also the hypoadrenal asthenic, and the thin-muscled person with status lymphaticus, each with hypotonia. Enuresis in childhood is, in the author's opinion, due to a hypopituitary factor with its lack of smooth muscle tone; it is a source of grave psychic harm to the child through constant reproaches, and is probably the origin of psychogenetic factors in these persons (not the reverse as usually held). Such things influence character and result in definite personality, summated types due to endocrinal predominances, as thyroid or pituitary personality, and the like. Abnormal mental states are so consequent. Dr. Davis holds that many such are found in dementia præcox and in psycho-neuroses; but manic-depressives are not so determined. Involution melancholia is probably the most clearly established endocrinal psychosis, but it does not exemplify the inherent conscious worry which it is the writer's desire to emphasise. Types which arise from a definite reaction to the endocrinal situation are seen in the "shut-in" personality or the "shallowness-of-interest" case. Emerson found status lymphaticus to occur in 29 *per cent.* of præcox cases; and Davis in 24 *per cent.* of war neuroses in a series of 100. The latter are liable to hypotonia with under-developed muscles—a potential defect to which they necessarily succumb under army stress and exhaustion. Conscious awareness of the defect is an undoubted factor. There is instanced an arrested acromegaly in a patient æt. 28, who acquired a severe psycho-neurosis resulting from consciousness of the abnormal facies. The mechanism involves insight, worry and discouragement with character alteration. This can only be combated by a philosophic self-knowledge obtained sufficiently early by preventive education. In præcox the awareness is very early and indeed prodromal. Other factors also enter, resulting in præcox as the "fleeing" attitude (the retreat into a psychosis), and in psycho-neurosis as the "fighting" attitude (a wild combativeness with less submission).

JOHN GIFFORD.

2. Neurology.

A Special Mode of Reaction of Immature Central Nervous Tissue
[*Ueber eine besondere Reaktionsweise des unreifen Zentralnervenge-
webes*]. (*Arch. für Psychiat., München, Bd. i, December, 1919.*)
Spatz, Hugo.

The writer gives a description, with diagrams and microphotographs, of the appearances of the spinal cord at various intervals after transection of the cord in newborn rabbits. In the course of about eight days all the constituents of the tissue of the portion of the cord next to the lesion become wholly liquefied, so that nothing remains there but a hollow space containing fluid. In the stump of cord from which a part has been thus, as it were, melted off, such nervous elements as have perished are speedily removed, and the supporting tissues, especially the glia, remain in a late embryonic state of cell richness. The loss of nervous elements is not followed by any lasting reactive

changes in the connective tissue and glia; there is no scar-formation such as is observed after similar experiments on full-grown rabbits. Thus the demarcation between the tissue that survives and the tissue that becomes liquefied is exceedingly sharp. As the blood-supply of the parts of the cord nearest its circumference is less interfered with than that of the central parts, those more superficial parts often survive, so that around the hollow space left by what has liquefied a sort of curtain often remains, more or less thin, hanging from the stump like an empty sleeve. This, composed mainly of glia tissue rich in cells, includes a few nervous elements that have survived the injury.

The special mode of reaction of immature nervous tissue demonstrated by these experiments on newborn animals may explain the occurrence in man of those conditions of syringomyelia and porencephaly in which, as a result, not of mere arrest of development, but of some damage in early life, whether from trauma, from hæmorrhage, from thrombosis, or from local infective inflammation, there is observed, along with production of a similar hollow space containing fluid, the same cleanness of outline of that space, the same contiguity of space to fairly sound nervous tissue, and the same notable absence of the scar-formation that commonly follows a like damage in adults.

SYDNEY J. COLE.

A Sketch of the Origin of the Cerebral Hemispheres. (Journ. of Comp. Neur., xxxii, No. 4, February 15th, 1921.) Herrick, C. Judson.

Early in vertebrate evolution the terminal portion of the neural tube gave rise to two pairs of lateral evaginations, in correlation with the differentiation of the two sense organs that serve as the most important distance receptors—viz., the optic vesicles and the olfactory bulbs. In the most primitive vertebrates of to-day almost all of the brain in front of the mid-brain is dominated by the olfactory system; and the differentiation of this region in higher forms has taken place largely under the influence of systems of non-olfactory fibres that have grown forward into this olfactory territory. Increasingly complex correlations of other senses with smell have led to the elaboration of separate correlation centres in the fore-brain for each of these reflex patterns, differing for each species of animal according to its mode of life. The various patterns of cerebral architecture in the vertebrate series are expressions of these functional relationships. Each pattern reflects some particular grouping of the sensori-motor elements of behaviour characteristic of the species. It would seem as if Nature had tried many experiments, each successful within a certain environmental range.

For an aquatic life the most successful type appears to have been the teleostean; but this, though capable of unlimited modification of detail on the plane of relatively simple forms of reflex behaviour, has not proved adequate for differentiation in the direction leading up to the individually modifiable and intelligent forms of behaviour. Moreover, no highly specialised fishes were able to make the structural readjustments required to maintain themselves in inland waters during the continental elevation and consequent drought of late Silurian times. On the other hand, certain comparatively unspecialised ganoids were able to survive this period by developing accessory respiratory organs,

and by so modifying the brain and its membranes as to facilitate its aëration in a reduced supply of oxygen. Those which thus became able to leave the water as amphibians probably possessed fully evaginated cerebral hemispheres similar to those of protopterus and lepidosiren, for all modern amphibians—larval and adult—exhibit this type of brain. The more diversified conditions of life on land require far more complex centres of higher correlation than those possessed by any fish; and, of all types of fore-brain, only that which possesses widely evaginated thin-walled cerebral hemispheres, capable of indefinite expansion without undue thickening of the wall, can be elaborated into higher complex forms.

In the teleostean type we see the high efficiency, on the reflex plane, of solid cerebral masses. In higher vertebrates with fully evaginated cerebral hemispheres, local thickenings of a different sort appear in the lateral walls of the hemispheres themselves—in reptiles and especially in birds. Here, again, this structural form is correlated with the predominance of stable, inheritable, reflex and instinctive types of behaviour. In mammals, on the other hand, in whom individually modifiable behaviour is the most characteristic feature, such extensive solid thickenings of the walls of the hemispheres do not appear; instead, the highest correlation tissue of the brain is spread out in thin sheets, as cerebral cortex.

Solid masses of cerebral tissue serve well for complicated reflex and instinctive activity whose patterns are inherited and relatively stable, but high specialisation in this direction seems to have precluded the possibility of any great development in the direction of individually modifiable behaviour, as manifested by capacity for rapid learning by individual experience. The development of the labile functional type goes hand in hand with the extensive elaboration of thin sheets of correlation tissue, as exemplified in the cerebral cortex, in which numerous functionally distinct fields are well separated in space, and are at the same time in free communication through systems of association fibres of unlimited complexity, which find ample room in the subcortical white matter. To structural specialisation of this sort there appears no assignable limit. The nutritional requirements of the tissue are readily satisfied by its close apposition to the rich blood-vascular supply of the pia mater and to the cerebro-spinal fluid of the meningeal spaces.

SYDNEY J. COLE.

Absence of Lobus Olfactorius and Sclerosis of Cornu Ammonis. (*Arch. of Neur. and Psychiat.*, iv, p. 151, 1920.) Tanaka, F.

Tanaka reports and fully works out a case of bilateral absence of the olfactory bulb and tract. Such cases are rare. He summarizes previous literature and discusses theories of causation. Weidenreich investigated one case and quoted nine others. Kundrat describes cases also showing other brain abnormalities; and Valenti recorded a case. Broca and Zuckerkandl by comparative anatomy, and Retzius embryologically, assume the rhinencephalon as the centre of smell. But in man the parts especially subserving this function remain undetermined, research by many workers having led to varied conclusions. Suggested

sites are: (1) the lower extremity of the temporal lobe; (2) the gyrus hippocampi and uncus; and (3) the lobus pyriformis (in association with other areas). Brodmann emphasised the gyrus hippocampi on account of histologic construction diverse from adjacent areas.

Unfortunately in the present instance no evidence was obtained in life as to the sense of smell, thus preventing absolute deductions. Macroscopically the general form, size, and convolutional patterns were normal and almost symmetrical. In both hemispheres the bulbus and tractus olfactorius were absent, the trigonum olfactorium was rudimentary, the sulcus olfactorius was absent (left) and under-developed (right); and the gyrus hippocampi of each hemisphere showed atrophy and flattening. Histologically changes occurred in the cornu ammonis—reduction of grey matter, especially pyramid cells, and in places complete absence of the cell-layer; also fewer nerve-fibres in the deep branch of the alveus. Atrophy rather than aplasia is assumed as the alteration was not uniformly distributed, and varied stages of change were seen in the cells. The gyrus hippocampi showed definite changes to a lesser degree, and accorded with the macroscopic observation. Ramon y Cajal favours the location of the olfactory sense in the cornu ammonis, a fact of interest in the light of these findings. He has demonstrated that the olfactory nerve develops separately from its central part, and accomplishes connection with the brain later. Secondary changes in the olfactory centre are therefore not unreasonably expected. On the contrary, however, the patient was long epileptic, and it has been pointed out by several investigators that in certain cases of epilepsy the cornu ammonis is somewhat similarly altered. It is impossible then to regard this case as finally fixing the location in the cornu ammonis, but the author advances it as a contribution to further research.

JOHN GIFFORD.

The Physiologic Significance of the Babinski Toe Response. (*Arch. Neur. and Psychiat.*, September, 1920.) Meyers, I. L.

The Babinski response consists of a group of simultaneous movements, especially dorsiflexion of the great toe, separation, generally with plantar flexion, of the other toes, and eversion of the foot. Associated with these are contraction of the quadriceps cruris and the gluteus maximus, pure extensors of leg and thigh respectively. That of the gluteus maximus has been noted by the writer, and may often be seen when a patient is in the prone position. The response should be classed with the co-ordinate or purposive reflexes, which occur, or are emphasised, after removal of cerebral control. Various theories have been suggested; but, apart from other objections, neither theory explains the associated movements. Special apparatus was designed in conjunction with Marey's tambour and the kymograph, and graphic records were thus obtained (1) of the normal plantar response, revealing absence of quadriceps or gluteal movements; and (2) of the Babinski reflex from fourteen hemiplegic or paraplegic patients. In the latter group there invariably occurred, simultaneously with the toe response, contraction of the homolateral quadriceps, hamstring and gluteus maximus muscles. With a mild stimulus the contralateral thigh showed only slight movement of the hamstring. When the stimulus was strong the homolateral

quadriceps contraction was succeeded by immediate relaxation coincident with contraction of the contralateral quadriceps. One case of Friedreich's ataxia gave a somewhat reversed reaction possibly due to muscular atonia, *i.e.*, with the Babinski toe response there was flexion of the knee with relaxation of the homolateral quadriceps and gluteus. In hemiplegics the normal limb contrasted with the affected one in that a mild stimulus produced dorsiflexion of foot followed by plantar flexion of great toe and no associated movements; if the stimulus were strong the limb was rapidly withdrawn.

Further experiments were undertaken to ascertain whether the limbs in walking ever reproduce the combination of movements occurring with the Babinski sign. A brief indication of results is alone possible here. Records were obtained for both limbs simultaneously, and demonstrated for each limb six phases, the first four being those of propulsion: (*a*) the moment the foot touches the ground coming in contact by the heel; (*b*) a continuance, the whole foot in contact with ground, especially at the heel; (*c*) the pressure on ground now by ball of foot only, and much increased, estimated by Carlet one-fifth in excess of body-weight; (*d*) pressure on ground by toes only; (*e*) the foot in the air and advancing; (*f*) the limb returning to the ground. The contralateral limb presents similar phases, timed roughly thus: *d'*, *e'*, *f'*, *a'*, *b'*, *c'*; it should be noted that *a* and *b* overlap *d'*, and *c* is overlapped by *e'* and *f'*. It is found that the associated Babinski movements are reproduced in phases *a* and *b*, when body-pressure is at the heel mainly. In these phases of the step the movements are: the big toe is dorsiflexed on the foot; the other toes (as stated by Pettigrew) spread out and generally undergo plantar flexion; the whole foot becomes everted (movement forward and out); the knee is slightly flexed; the quadriceps and gluteus maximus are in contraction; and the contralateral limb is exerting pressure on the ground by the toes with its quadriceps relaxed (*d'*).

The following theory of the physiologic significance of the Babinski toe response is therefore suggested. Marie and Foix assume the function of progression is represented in the spinal cord, normally inhibited by the cerebrum. Cessation of inhibition results in the reassertion of the spinal centres, which, when stimulated, produce a minor stepping reflex in one or both limbs. Mild stimulus produces only phase (*b*), strong stimulus results also in a minor phase (*d*), but if the latter is pronouncedly produced, the quadriceps of the contralateral limb contracts (an assertion of phases *a'* and *b'*). The usually prominent features of the Babinski response are probably emphasised owing to the nearness of the muscles concerned to the point of application of the stimulus. Similar results occur when the zone for the Babinski reflex extends over the whole limb and even the lower abdomen; a stimulus to the upper part of the limb reveals only extension of the limb (strong contraction of quadriceps and gluteus) without toe dorsiflexion—that is, the muscles which respond are those nearest to the point of stimulation.

The crossed plantar reflex, *viz.*, plantar flexion of all toes with extension of the foot (frequent in paraplegia and occasional in hemiplegia), is also intelligible by this theory. If the Babinski response represents

phase (*b*) of the step, the contralateral response should be phase (*d'*); this proves to be the case. Absence of the crossed reflex may therefore be due to remoteness of the toes in the non-stimulated limb. The reason why the Babinski response is obtained with marked facility by pressure at certain foci is made clear by the theory: these "receptive foci" are the heel, the ball of the foot, and the area under the outer malleolus. The latter produces effect through the peroneus longus, which Huxley states to be essentially an organ of locomotion, and distinctive of the human foot.

JOHN GIFFORD.

The Coincidence of Cervical Ribs and Syringomyelia. (Arch. of Neur. and Psychiat., November, 1920.) Bassoe, P.

The earliest record of the combination of cervical ribs and syringomyelia appears to be that by Borchardt of Berlin in 1901, in a woman, æt. 35. Oppenheim quotes another case in a woman, æt. 19, where bony tumour was presumed; operation revealed cervical ribs which had been rendered prominent by scoliosis. The later course declared an undoubted syringomyelia. Haenel cautions that local, brachial, or kyphotic accompaniments of such ribs should suggest syringomyelia; and Jelliffe and White that symptoms of this disease have on several occasions led to the removal of a cervical rib. Oppenheim states that such ribs are stigmata of degeneration and may accompany other manifestations of a neuropathic predisposition; he particularises hysteria, hypochondriasis and spinal gliosis. Streissler favours this view and regards associated scolioses not as resultant, but as parallel features, as are many malformations, *e.g.*, spina bifida, hare-lip, club-foot, congenital lipoma and others. He notes also the co-existence of psycho-neuroses, syringomyelia, multiple sclerosis and muscular atrophy.

Bassoe's attention was directed to this subject by three cases of his own. Local symptoms led to recognition of cervical rib and operative treatment was successfully undertaken. The later history was unfortunate; the first developed a profound psycho-neurosis, the remaining two became confirmed hypochondriacs with persistent symptoms which treatment failed to alleviate. Three additional cases, each associated with syringomyelia, were referred to him and are reported. A man, æt. 34, had a seventh left cervical rib, which was removed. For two months he was well. Pains then recurred, and after fifteen months slowly advancing symptoms were diagnosed as syringomyelia, which the lapse of years has confirmed. In 1916 there was seen a woman, æt. 40. Thirteen years previously atrophy of her right hand commenced and she was found to have bilateral cervical ribs, but the severity of her symptoms had negatived operation. Now for a year there had supervened left-handed atrophy; examination gave typical signs of syringomyelia, and for three and a half years these have considerably advanced. In the next case, that of a man, æt. 32, syringomyelia was diagnosed, the first symptoms having originated in the right leg twelve years before. There was nothing to suggest cervical ribs, but in view of the earlier coincidences he was examined by X-ray. The findings caused amazement, as bilateral cervical ribs were present, larger on the right side. Reliable observers have recorded beneficial results from operation in a

large series of cases, and on a broad outlook the emphasis of the present paper is incorrect. Nevertheless, from his own experience the author concludes that he would "regard all bearers of cervical ribs with extreme suspicion and accept them as possessed of well-balanced minds and structurally normal central nervous systems only after very close scrutiny."

JOHN GIFFORD.

3. Clinical Psychiatry.

Two Cases of "Folie à Deux" [Deux cas de "folie à deux"]. (*L'Encéphale*, March, 1920.) Laignel-Lavastine and Boutet, A.

Two varieties of *folie à deux* have been described, one by Régis—the simultaneous type—and the other by Lasègue-Falret—the communicated type. The authors presented four patients to illustrate these two varieties. Thus two sisters, æt. 46 and 44, exemplifying the simultaneous type, developed delusions and hallucinations independently of one another. How long each had been affected is not known. Finally, in January, 1919, the elder sister, weary of supporting her troubles alone any longer, related everything to the younger sister, only to discover that the latter had been for years past experiencing similar phenomena. Within a short time of this exchange of confidences the elder sister was admitted into the asylum, being followed by the younger three months later. The authors realised that what they had to deal with in the case of these two sisters was "a double chronic hallucinatory psychosis developed in some sort of parallel manner."

The second variety of *folie à deux*—the communicated type—is illustrated by an old married couple, æt. 66 and 64, who had been much affected of late years by the loss of two sons killed in the war, as well as by the death of a granddaughter. The wife first developed false interpretations and delusions of persecution—the chief offender being the occupant of the rooms above her own. She communicated her delusions to her husband, a somewhat feeble-minded man, who accepted them without question and who, moreover, found proof of them in his own hallucinations and interpretations.

Of these two varieties the authors state that one much more frequently meets with the simultaneous type of Régis. It is a question of a chronic hallucinatory psychosis, in the genesis of which contagion plays no part; on the contrary, it depends on hereditary predisposition like the familial form of paranoid dementia præcox, to which condition it is somewhat closely related.

NORMAN R. PHILLIPS.

Periodic Psychoses and Diabetes. Synchronism of the Attacks [Psychoses et diabète périodiques. Synchronisme des accès]. (*L'Encéphale*, April, 1920.) Porot, A.

Dr. Porot, of Algiers, draws attention to the intimate relationship that may exist between periodic melancholia and diabetes, the one not only following the fluctuations of the other, but also appearing and disappearing simultaneously with it. It is true that other observers have remarked on the occurrence of mental depression in the course of diabetes; some have even demonstrated a parallelism between the two

conditions. Probably, however, no observer has been able to bring forward cases where the synchronism of the glycosuric crisis and the melancholic attack has been more clearly and distinctly defined. Of the two cases described the first was that of an army officer who had served chiefly in tropical countries. There was a previous history of malaria. He had four recurrent attacks of melancholia, each being accompanied by glycosuria, as much as 80 grm. of sugar per litre being found on one occasion. The attacks began about the age of 37, and succeeded one another at intervals of two to four years.

The second case, æt. 50, was that of a North African Jew, who was somewhat obese but previously healthy. He had three recurrent attacks of melancholia which were accompanied, as in the former case, by glycosuria. There was an interval of about two years between the attacks.

In each of the two cases the attacks were treated on strict dietetic lines, with the result that both glycosuria and melancholia completely disappeared.

In his concluding remarks about the second case the author points out how particularly striking was the parallelism between the two crises—melancholic and glycosuric—with their simultaneous onset following on a common cause (emotional shock), their synchronous evolution and their contemporaneous cure. It cannot be said that the diabetes preceded the melancholia, as the urine, which was submitted to a monthly examination in the intervals between the attacks, showed no trace of sugar in spite of the fact that the diet was not restricted. For similar reasons it cannot be claimed that the melancholia was the primary element.

Dr. Porot argues that : did we possess a direct and specific method of attacking the psychic factor, it might conceivably be used indirectly to reduce the quantity of sugar. But, in the dietetic regimen we have a means of directly attacking the physical element ; and the results obtained show conclusively the success which may attend the employment of this method of treatment.

NORMAN R. PHILLIPS.

A Comparative Study of Personality Traits in Early and Late Dementia Præcox. (State Hosp. Quart., February, 1921.) Rowe, C. E.

A Personality Study of Late Dementia Præcox. (State Hosp. Quart., February, 1921.) Perkins, A. E.

The Mental Make-up of Cases of Dementia Præcox occurring in Early and Late Life. (State Hosp. Quart., February, 1921.) Grover, M. M.

Personality traits—mainly the shut-in personality—have for some time been recognised as occurring in the subjects of dementia præcox. Whether these traits represent the onset (Kraepelin) or not is still in dispute. Certain kinds of people become precocious dement, but who can say of a given child or youth whether that one will become a precocious dement or not? Are there any differences between the personal histories of early and late cases of dementia præcox, taking late cases to mean those developing after thirty years of age? Are the types different after dementia præcox has set in (or set in as far as that the patient is certified and confined)? Why does a given

case not show signs of mental disorder until after thirty years of age? These are some of the questions the above authors try to solve, and briefly they find as follows:

The definitely shut-in type of mental make-up appears as often in the early as in the late cases. The more diligent the search for it the more often is it found. Yet there are late cases who were considered normal, took their places well in the home and community for years until an exceptional occurrence altered their life. Various situations in life may be precipitating factors, and there may be more than one.

Dementia præcox is stated to occur often after childbirth where a woman has found adaptation difficult, for then the bonds are tighter and she cannot so easily get away. It is probable that many cases of dementia præcox which break down late would not have done so, in spite of fundamental weakness, but for the strain of some distressing experience to which the individual reacted with marked effect. Some cases show as the result of the psychosis just the peculiarities which others show before any mental breakdown.

In the younger cases there was a gradual deteriorating process, and the deterioration was deeper than in the late cases; they had more physical stigmata, and they were more backward at school; they were seclusive, less aggressive, less efficient, more inclined to be sexually auto-erotic and to show an abnormal love for the opposite parent. There were also more of the lazy wanderers and docile diligents in the early cases.

Later cases show good preservation of personality, rational affect and little deterioration, a greater percentage show a tendency to be social, aggressive and efficient, and a larger percentage are married.

Certain cases of dementia præcox for a long time were included in the group of paranoia because they developed later in life, and had good preservation of personality, and did not markedly deteriorate. These later cases show a more florid type, and have more active delusions and hallucinations.

In both cases lack of interest in or attraction to the opposite sex was marked. The question of possible abnormal condition of the sexual organs arises.

Interesting abstracts from thirty-six cases are given.

W. J. A. ERSKINE.

Some Cases of Familial Dementia Præcox: a Contribution to the Study of the Etiology of Dementia Præcox [Quelques Cas de Démences Précoces Familiales; Contribution à la Recherche de l'Étiologie de la Démence Précoce.] (Bull. de la Soc. Clin. de Méd. Ment., December, 1920.) Vernet, P.

The writer gives notes of seven pairs of cases—mother and daughter (two), brothers (two), sisters (one), and brother and sister (two). He lays stress on the influence of heredity, and particularly of alcoholism of parents; on the frequency of well-marked stigmata of degeneracy, with absence of evidences of syphilis; and on the etiological importance of constitutionally deficient neuronie durability. Infections, auto-intoxications and fatigue may act as exciting causes, but are not the principal cause.

SYDNEY J. COLE.

A Piece of Woven Fabric made by a Gross Dement [*Outils, armes, pièce d'étoffe tissée exécutés par des aliénés*]. (*Bull. de la Soc. Clin. de Méd. Ment.*, May, 1920.) *Ducosté, M.*

At a meeting of the Société Clinique de Médecine Mentale, Ducosté exhibited a number of articles made by asylum patients—mostly tools, weapons, and aids to escape. The gem of the collection was a small piece of woven fabric, made by a woman, æt. 42, who had been eight years in the asylum, and had probably been mentally affected for a very long time before admission. She had now reached a stage of extreme dementia. Her speech was reduced to a few grunts, she had stereotyped movements and blind and brutal impulses, did not dress herself, was utterly regardless of personal cleanliness, was dirty in habits, had lost the use of spoon and fork, ate with her fingers, and was gluttonous and coprophagous. Though she had for a long period never occupied herself, she took up one morning a needle and some wool and made this piece of stuff. It is only a few centimetres square; she might perhaps have made it bigger, but Ducosté, afraid lest it might be lost, confiscated it as soon as he saw it. As the photograph shows, the work is not knitting, or crochet, or darning, but weaving, having a warp and a woof. She had never had any interest in weaving, and had never lived in any district where weaving was carried on. Ducosté remarks that weaving is one of the last acquisitions of primitive civilisation and dates from the close of the neolithic period. Was it the production of some primitive genius? Ducosté thinks it was more probably a result of chance, and that this dement's achievement may favour such a suggestion and throw light on the mode of origin of the art.

SYDNEY J. COLE.

Coexistence of Two Delusional Systems, Persecutory and Erotomaniac [*Coexistence de deux délires : Persécution et érotomanie*]. (*Bull. de la Soc. Clin. de Méd. Ment.*, December, 1920.) *De Clérambault, G., and Brousseau.*

This Frenchwoman, æt. 53, exhibits two distinct delusional systems, each complete in itself, and capable of existing in the absence of the other. The delusions of persecution have existed for about ten years; the erotomania is of comparatively recent development.

Her history is as follows: Her father was alcoholic, and the family was disunited. The patient has never had any serious bodily illness; menstruation has always been regular, and the menopause is not yet established. She has always been of a mendacious and imperious disposition. Her circumstances have been affluent; for a time she had a milliner's business, and later, thanks to a wealthy paramour, she lived in luxurious idleness for eighteen years, during which she enjoyed considerable liberty and was deriving auxiliary funds from secret sources. On the death of her lover in 1907 she at once attached herself to another, younger than she. He seemed fairly docile, and she reckoned on marrying him, but, contrary to her liking, he made her live in the country, where he gave her a house near his château. In spite of frequent pleasure trips to Paris, she found rural life dull and irksome; in the country, moreover, she encountered some hostility by reason of

her irregular position. After about four years her relations with her lover were broken off, probably because of delusions then developing.

She fancied that the peasants behaved vexatiously towards her, followed her about, insulted her, and played pranks on her. She complained of machinations directed against her by an old county family (perhaps her lover's family). In 1915 she fancied that the *curé* denounced her from the pulpit as a spy. More recently she has imagined that her papers and belongings have been disturbed and pried into. Becoming anxious about her money, she has carried large sums on her person—twenty to thirty thousand francs. She has said that there are people following her about, sniffing at her, making noises in their throats, and using secret signs, and that they belong to a secret society which they have named "La Morve." She has said these people have reproached her for wearing the low-necked dresses that she has "found necessary since she had a diphtheritic throat."

The erotomania began with a long period of diffuse erotism. She believed that wherever she went she was the object of mute advances on the part of military officers of every rank. This phase was succeeded by at least one short episode in which the erotism acquired some degree of fixation, for in 1917 she imagined herself more especially sought after by a certain American general commanding a camp in her neighbourhood. In 1918 the erotomania became finally crystallised as a delusion that the King of England was enamoured of her. She says she has not responded to his advances, never having understood them at the time; but she is convinced that though she has never recognised him till too late, under manifold disguises he has been continually in her path, and that though she has only subsequently perceived the hidden meaning of what they said, many persons whom she chanced to meet, especially officers, were his emissaries. She interprets in accordance with her delusion various incidents even of the remote past. One night at an hotel, many years ago, somebody knocked at her door and went away; lately it has dawned on her that that must have been King George, then Prince of Wales. She may not have attempted to thrust herself on His Majesty—may not even have written to him except upon the singular occasion presently to be mentioned—but under the influence of her delusion she has made many expensive trips to England, has loitered near the gates of royal residences, and waited at railway stations where she imagined he had arranged to meet her. Such engagements on his part never having been fulfilled, she has sometimes wondered if she has been deceived in him, or if, as he cannot dismiss her from his mind, she is perhaps a mark for his enmity. But these doubts never last long; she soon conceives some reassuring explanation for his paradoxical behaviour. As is so often the case, the erotomania is ambitious rather than amorous. It arises from pride, the erotic factor being no more than accessory.

Meanwhile, not only have the old delusions of persecution persisted, but she has at times expressed others, of much the same sort, associated with the erotomania. She has fancied that His Majesty has prevented her from obtaining rooms at hotels in London, and that it was through his orders that one of her trunks, containing numerous portraits of him,

disappeared. When it was restored to her she imagined he had taken from it some of the more bewitching articles of her attire.

Returning one evening from London, vexed at her fruitless journey, she complained to the police in Paris that people were jeering at her. In consequence of this complaint she is now in the *Infirmierie Spéciale*. Like many other erotomaniacs, for some time after admission to the institution she concealed her delusions with voluble evasiveness, and showed herself to be an accomplished liar. In order to elicit them when she was presented at a meeting of the *Société Clinique de Médecine Mentale*, recourse was had to some amount of play-acting. Humbugged as to the nature of the occasion, and exhorted to furnish there and then a memorial that might be submitted to the august personage particularly interested in her, she wrote a letter to His Majesty, in which her delusion concerning him was rather implied than expressed.

SYDNEY J. COLE.

The Fate of a Sibyl [*La fin d'une voyante*]. (*Bull. de la Soc. Clin. de Méd. Ment.*, December, 1920.) *De Clérambault, G., and Brousseau.*

Twenty-five years ago, as a prophetess inspired by the angel Gabriel, Henriette C— set all France agog. Her predictions shook the political, religious and scientific worlds; journalists and public men went in all seriousness to consult her; brilliant troops of women, of good repute and ill, extolled her, petted her and revered her, and the crowds of clients at her door were so dense as to need regulating by the police. Doubtless she felt assured of prosperity without end, and was a victim to that illusion of permanence by which all strong feeling is accompanied; but, after four or five years, fashion forsook her, and she has since been living in scornful solitude among a few still unpawned relics of former luxury.

Her vaticinations were uttered in a state of euphoric trance, in rapid, rhythmical language, mostly rhymed. There was a splitting of the personality. She was hardly conscious of saying anything; it was not she who spoke, but the angel—through her mouth. She never heard him speak to her, hardly knew what he said, and had little recollection of it afterwards. Nor had she any visions; the scenes she described were visible only to the angel. In this manner she foretold not only where the lost property or the missing will would be found, and when the hoped-for legacy would accrue, but great religious and national events. The republic would fall, and the monarchy and the church would be restored; Zola would enter the Academy, and Yvette Guilbert be converted; the Seine would run red, and the Bourse and the Opera be consumed in flames; there would be pestilence and flood; a new Attila would arise, and England would be dismembered. Moreover, she had "intuitions"—psychic hallucinations without verbo-motor accompaniment; the angel instructed her in metempsychosis and the Immaculate Conception.

Her supernatural gifts this daughter of a solicitor's clerk had acquired in the following way. Her parents, pious folk, resorted frequently to a professional sorceress, equally pious, but very practical, who not only

had ecstasies, visions and inspirations, and practised automatic writing, miraculous healing and prophecy, but foretold to these people, among other things, that their daughter Henriette, then aged 19, would one day be a prophetess like herself. When Henriette was 22, and had had two love affairs that had fizzled out in fastidiousness and meanness, she had a cataleptic crisis in the wise woman's house. A year later, to the day, she had another such crisis, with levitation; she heard Joan of Arc addressing her; the Virgin visited her; the archangel spoke by her mouth. It was revealed to her that inspiration would depart from her if ever she lost her virginity or used her miraculous powers for gain; but this latter caution must have applied to herself alone and not to her mother, who, quick to exploit her daughter's gifts, was soon receiving heaps of others more tangible, that the daughter perhaps knew not of. They straightway spurned the sorceress who had instructed them, for Henriette could go one better.

The collective psychosis she occasioned was in part a mythomania, in part a syllogistic delirium. Outside the throng that resorted to her, people everywhere were arguing, with a profuse expenditure of logic, as to whether her powers were satanic or divine. The religious world syllogised upon the content of her predictions, the scientific upon the manner of them. Journalists sought the opinions of eminent doctors; a member of the Academy of Medicine quoted Shakespeare and said our human science should be modest. An investigation by a committee of priests and physicians was solemnly organised. During the examination the angel let drop some words whose mundane character provoked instant remark; but Henriette's popularity survived this mischance for three or four years.

The leading psychological features of her case at this period were hysteria, eroticism, megalomania and passive mythomania. The hysterical basis is demonstrated by the suggestibility, docility, emulation, imitation, unconscious auto-suggestion, catalepsy, levitation and ecstasy. The eroticism is revealed by the ineffable sensations she experienced, by her intuition that her gifts were dependent on her virginity, by her incessant abortive matrimonial projects, and by her predilection for erring women—a predilection which she explained was not hers but the angel's. Her life was a constant struggle between her amorous inclinations and her mystical duties or ambitions.

Her later years have been full of rancour, by no means wholly unjustified, against mankind at large, who, after making use of her, have cast her off without recompense; against the entire political party that has abandoned her; against this or that person of royal blood to whom she has submitted her claims; against her dead parents; and against an old family friend who, under no known legal liability, has for years been regularly paying her a monthly allowance. Her disillusion has been complete; she has lost all religious sentiments, all political convictions and all feelings of patriotism, even in the dark days of the war. Her nihilism has been somewhat mitigated from time to time by megalomaniac optimism, with some revival of her old sense of her religious and national mission, but all such ideas have been subordinate to her pride.

In 1918 she declared herself to be the child of Prince Frederick Charles

of Prussia and Eugénie de Montijo. She is now in the Infirmerie Spéciale, to which she was admitted last December, at the age of 48. She has delusions that she is Joan of Arc, that she is to be burnt by the priests, that she is a daughter of Napoleon III, and that the Duchesse de Vendôme has prevented her marriage with the Duc d'Orléans. She has sexual preoccupations, she soliloquises in an agitated manner, has fits of screaming and smashes things. She utters threats against certain specified persons, and she writes incoherent letters to neighbours and to various crowned heads, complaining of her wrongs.

SYDNEY J. COLE.

The Oculocardiac Reflex (Dagnini-Aschner Phenomenon): its Use in Medicine and Psychology. (*Arch. of Neur. and Psychiat.*, January, 1921.) Naccarati, S.

The Manometric Eye-compressor [L'Oculo-compresseur Manométrique.] (*L'Encéphale*, July 10th, 1920.) Roubinovitch, J.

The phenonemon with which these papers are concerned was first reported in 1908 by Dagnini and by Aschner independently. It consists in slowing of the radial pulse, lowering of the blood-pressure and modification of the respiratory rhythm from compression of the eyeballs. It is a true reflex, having as its centripetal path the trigeminal nerve and as its centrifugal path the vagus, and, in a less degree, the sympathetic. If the sympathetic connection with the medulla is interrupted, as experimentally by section of the cervical cord, the centrifugal impulse travels only through the vagal cardio-inhibitory fibres, and the reflex is consequently exaggerated. The slowing of the pulse is not a pain response; pressure over different sensitive spots of the body does not induce the changes of pulse-rate obtainable by ocular compression.

The technique is simple. The subject is placed in the recumbent posture or sits comfortably in an arm-chair, the head lying on the back of the chair. He is allowed to rest until the pulse becomes quite regular and equal for the four quarters of a minute. Then, with the thumb and index or middle finger of the right hand, gentle pressure is exerted on the eyeballs through the closed lids. The experimenter stands at the subject's right, taking the pulse at the right wrist. A more trustworthy comparison of results is obtainable with a special instrument. That used by Naccarati is like spectacles whose lenses are replaced by wooden spoons covered with cotton; the pressure is applied with a sphygmomanometer. Roubinovitch's paper is a description (with photographs) of another; the action in this is by inflation of rubber bulbs, to which a pressure gauge is connected.

Some authors have proceeded on a crude assumption that if the pulse-rate is reduced by from five to twelve beats per minute the reflex is normal; if by more than twelve, exaggerated; if by not more than four, abolished; and if instead of a slowing there is a quickening, inverted. Such classifications are arbitrary, and do not give the real individual value, for in the same subject very different results may be observed at different times. No wonder the reports of different investigators are so discordant. On one point only is there general agreement, *viz.*, that in tabes the reflex is usually abolished. The difference in one minute

between the pulse-rate without ocular pressure and the pulse-rate with pressure should always be indicated in full, with a positive or a negative sign; this algebraic difference should be called the "reflex index." If there is a quickening the index is negative. The pulse-rate should be stated, for a given index-value will not have the same significance in a tachycardiac as in a bradycardiac.

Naccarati reports his observations on 165 normal and 336 pathological subjects. His tables show the great diversity of the results. A single observation is worthless; an average must be taken of the results observed at a number of different times. Slight deviations from the average index have no pathological significance. Large deviations may be found in normal states and in normal subjects, but may indicate abnormal physiological or psychological conditions, or may be expressive of pathological states. In psychology the reflex may be of use for the study of some traits the scales of which are lacking. As regards pathological states, Naccarati finds that in tabes the index is zero or very small; exceptionally it exceeds three; it varies little, if at all, at different times. In general paralysis also the index is apt to be small, but cases with a larger positive or negative index are much commoner than in tabes. In feeble-minded persons Naccarati does not find the tendency to a large positive index alleged by some authors. Psychoneurotic persons, feeble-minded, and persons with organic nervous diseases do not show any substantial variations that could not be found in a group of normal subjects. In epilepsy, although a well-defined tendency to a large positive index (vagotonic reaction) is found, it is not the rule; cases with small positive indices, with zero and negative indices, are often met with; bromides do not reduce the index; large variations from positive to negative are found in the same patient at different times. Hypothyroid patients tend to show a positive index, and hyperthyroid a negative; large variations from time to time are observed. Administration of thyroid extract to the hypothyroid patient seems to reduce the index.

SYDNEY J. COLE.

Endocrine Stimulation as Affecting Dream Content. (*Arch. of Neur. and Psychiat.*, February, 1921.) *Finley, C. S.*

The patient, a single woman, æt. 45, well-nourished and with a general appearance of good health, complained of extreme lassitude following an attack of influenza. Usually energetic and holding a position necessitating considerable mental and physical activity, she found it very difficult to force herself to get up in the morning; her fatigue became less apparent as she worked until 4 or 5 o'clock, and she went to bed exhausted about 8. She had a history of previous good health; ate and slept well and had no physical signs of disease. Her blood-pressure in the mid-afternoon, when at her best, was 90, systolic.

A course of endocrine therapy was decided on, and she was given 1 gr. of extract of whole pituitary gland each morning. At the end of a week or ten days the blood-pressure had risen to 110, systolic; she felt better and was able to work her usual number of hours. About this time she began to have vivid dreams every night; previously she

had always fallen asleep promptly and had not been conscious of dreaming a dozen times a year. After ten days of pituitary administration she started a series of delightful dream experiences as soon as her head touched the pillow and she began to anticipate going to sleep. Her dreams were mostly about travel, and were characterised by vividness, action, bright colouring and anticipation of happiness to come; she always awoke pleased and happy. After three weeks of pituitary extract she developed coarse intention tremor of the hands and the thumbs were occasionally sharply adducted; she continued for a week or two longer and then reported the matter, and the pituitary was discontinued. Blood-pressure was still 110, and the patient was easily fatigued, so 1 gr. of extract of suprarenal was given each morning and $\frac{1}{2}$ gr. at noon. A week later the tremor and adduction of the thumbs commenced to cease and she felt well; her dreams continued, but changed in character; they were less vivid, not so easily remembered, there were no colours, and they were without exception unpleasant; she would wake up two or three times a night quite rigid with horror.

After taking suprarenal for ten days, the patient, who had always menstruated regularly, had a slight flow halfway between her periods. Medication was stopped and the patient felt quite well, and the frightful dreams ceased in about a week. During the next menstrual discharge dreams of the pituitary type recurred, and this happened at each period for the next three months, gradually becoming less and eventually ceasing. The author concludes that the hypophysis, the chief stimulant to action through desire, gave symptoms of over-activity of its normal functions, which included ovarian stimulation, raising to the surface of dream consciousness some of the many unfulfilled desires present in us all; similarly the disagreeable dreams following the taking of suprarenal illustrate the action of this gland as the physical basis of fear and its kindred emotions. "This case illustrates through the dream the physiologic control over desire and fear—the two great factors in human conduct. It is a good example of the purely physical origin of many dreams and the emotions behind them—an aspect of the subject that has been somewhat lost sight of in the fervour of Freudian interpretation."

L. H. WOOTTON.

The Direct Connection between Ovarian Cysts and Some Psychological Disturbances [*Troubles Psychiques en relation directe avec des kystes de l'ovaire*]. (*Bull. de la Soc. de Méd. Ment. de Belg.*, Nos. 181–182, 1920.) *Famenne, P.*

The author quotes four cases which suggest that all mental diseases are not necessarily cerebral in origin, but may simply be psychological disturbances due to abnormal functioning, or a lesion of organs often far removed from the central nervous system. He mentions Graves's disease as an example of an excess of internal secretion, which can be cured or alleviated by medicinal means or by ablation of part of the gland, and suggests that excitation or disturbance of the psychological centres due to ovarian hyperactivity may be cured by the excision of one ovary; he also mentions M. W. Barr's paper on asexualisation of

imbeciles, criminals and defectives in America, and suggests that removal of the gonads does not lower the low-water mark of the individual's mentality. Veterinary surgeons in certain countries cure by ovariectomy cows in milk which become nervous, agitated, excited or wasted; the ovaries are nearly always found to be cystic.

He believes that psychical troubles are more likely to be present when there are many small cysts, as there is more destruction of ovarian tissue than in the case of large cysts, where there may be considerable hyperplasia.

His four cases are as follows:

(1) A married woman, æt. 33; one child; signs of Graves's disease present. She became anxious, illuded, tremulous, had attacks of motiveless jealousy, was depressed, and believed herself persecuted by her neighbours. She was operated on eleven years ago and a small cystic ovary removed. Complete recovery mentally and disappearance of the Graves's disease. She has since had two children.

(2) An unmarried woman, æt. 30. For nine years she had melancholia with anxiety, religious and genital obsessions, incapacity for work, insomnia, hypochondria and attacks of hysteria. An enlarged right ovary was removed, and she has been quite well for six years.

(3) Married woman, æt. 27; five children. Became melancholic and anxious, incapable of making a decision; had semi-stuporose attacks, when she became motionless for hours together; was suspected of dementia præcox. Sometimes she had attacks of agitation, wished to throw herself out of the window; was self-accusatory, and thought it was a crime to bring children into the world; had insulting auditory hallucinations. She became bodily ill. The right ovary was painful and enlarged, and was removed (six years ago). She has had another child since then and is quite well.

(4) A woman, æt. 32; nymphomania since twenty. She had genital obsessions, psychasthenia, auditory hallucinations, attacks of excitement and despair. She masturbated continually. She was operated on. Both ovaries had a few cysts on them; the right one, more affected, was removed. Ten months later she was well, though a little run down; she had lost her vicious habits and sexual obsessions.

The author ends by saying that the cases mentioned are too few to draw any conclusions from, but they demonstrate the importance of the endocrine secretions on the whole organism and the existence of psychic troubles due to a hyperfunction of these glands. L. H. WOOTTON.

(1) *Syphilis and State Institutions.* (*State Hosp. Quart.*, August, 1920.) Lawrence, J. S.

(2) *Preliminary Report of an Investigation of the Incidence of Syphilis in the Families of Cases of Neurosyphilis.* (*Ibid.*) Heyman, M. B., and Raynor, M. W.

Lawrence reviews the course and promise of a determined anti-syphilitic campaign. Ancestral syphilis is an important factor in the production of defectives, deficient and delinquents. State laboratories provide statistics of the astonishing prevalence of syphilis and gonorrhœa. In January, the month of incidence of seasonal diseases, syphilis

ranks sixth in the list, and exceeds tuberculosis. As the former reaches its maximum in summer months, it may well be one of the foremost causes of sickness in New York State. Clinics were used in efforts at control; but patients will only attend for a few months, and not throughout the years necessary for cure. Visitors to the homes of these cases were instituted to encourage persistence. They discovered there a larger field of active disease, often early infective, among the families; also that relatives were in state hospitals (a further stage of the disease); and yet another class, homes broken up, whence the children were in orphanages. The last were offered testing facilities for these children, the blood Wassermann test being used as the readiest and most constant sign of syphilis, though not considered the only or most reliable proof if otherwise determinable. Over 3,000 tests have been taken from orphanages, private, public, and semi-private; 4 *per cent.* give a suggestive reaction, and of these less than 1½ *per cent.* give a four-plus result, which strength is requisite to confirmation of active syphilis. This remarkably small total percentage induced further research. Three children of one family, in order of birth, showed respectively a four-plus, a minus-plus, and a negative reaction, demonstrating that even with positive family infection a late child may be affected little, or not at all. The scattered families of the blood-positive children were next traced; and later those families whose children, though blood-negative, had symptoms of conjugal syphilis. Profound interest attaches to the results. One or both parents were frequently in state hospitals, and several times the death of the parents was attributed to unconfirmed tuberculosis, raising a doubt whether tertiary syphilis was not the real cause. Over 8,000 cases of new syphilis were recorded the previous year, and these figures are known to be incomplete. Further, it is perhaps rare for an early syphilitic not to infect at least one other. It is also being ascertained from all hospitals and tuberculosis sanatoria whether the complement-fixation blood test is a routine at entry; a large proportion have notified that it has been or is to be so. Many cases of syphilis are unnoticed because of their indefinite symptoms; the blood test should decide. Investigation of these families may reveal children and others apparently well, who, if untreated, will subsequently be patients.

The second article deals with parallel research from the hospitals. The work was initiated in 1917, and resumed in 1920. Familial investigation was decided on in all cases of—(1) systemic, and (2) neuro-syphilis; the latter is now reported. The patient originally infected was first located, then the family group possibly involved. The groups class in two ways: (1) patient, husband or wife, descendants and marital partners; (2) patient, ascendants for one generation, brothers, sisters, and marital partners. In every possible case there were obtained a Wassermann and a neurological examination. During the first three months of 1920 there were 75 neuro-syphilitics (57 male, 18 female), and the family groups included 254 individuals; total 329. Analysis on relationship showed single 14, married 61 (with 78 husbands and wives), children 146, and miscellaneous 30. Of the extra hospital group (254), there were dead 49 (19.3 *per cent.*); inaccessible or untraceable 44; already examined 82; and not yet co-operating 79.

Among them were discovered six paretics (adults 4, children 2), and several cases of spastic paralysis. Syphilis was established in the various groups as follows : of the total 38 *per cent.*, the extra-hospital 19.6 *per cent.*, husband and wife 20 *per cent.*, and of the children 18.5 *per cent.* Where the blood Wassermann reaction was negative the case was classed as non-syphilitic, but additional tests, and the completion of the group examination, will doubtless increase the incidence.

JOHN GIFFORD.

4. Treatment of Insanity.

A Century of Psychiatry [*Hundert Jahre Psychiatrie: ein Beitrag zur Geschichte menschlicher Gesittung*]. (Arb. für Psychiat., München, Bd. i, December, 1919.) Kraepelin, Emil.

This paper (115 pages, 35 illustrations), which serves as an introduction to the first volume of published work from the new German Institute of Psychiatric Research, opens with the remark that he who struggles along a toilsome path towards a distant goal will do well sometimes to look back. Easily may his courage fail, if all his efforts seem to bring him no further, if the way becomes uncertain, and unexpected hindrances arise. But if, in such a case, we survey the road behind us, we see that our strivings have not been in vain, and that in spite of difficulties we have indeed advanced, and have overcome many obstacles once thought insuperable.

So Kraepelin relates once more the progress of psychiatry since the days when the lunatic languished solitary, half-starved, naked and in chains, on filthy straw upon the stone floor of a dark and unventilated cell ; when the whip was so useful for rousing him from his reverie and recalling his attention to that outside world from which the lashes came upon him ; when the strait-jacket was all the more effective if it prevented him from scratching himself when he itched ; when, in cases of persistently dirty habits, a birching worked wonders, for the powerful stimulation of the skin of the buttocks had such a favourable influence on the sphincters ; when time-expired convicts were employed as warders, because their labour was cheap ; when, for safety, the attendants in asylums were accompanied on their rounds by dogs, and Reil suggested that when entering the cells they should wear armour ; when a French report stated that most people who had to look after lunatics became sooner or later insane (a belief still current in most countries, especially Germany), and a professor at Tübingen, lecturing on mental diseases, warned his hearers not for any long time to have anything to do with the treatment of insanity, lest they should go mad themselves ; when the asylum physician's principal qualifications were a commanding personality and an all piercing glance ; when psychiatric text-books and journals were largely taken up with disquisitions on the immortality of the soul and on the connection between mind and body ; when lunacy was an open shame to the patient and his family, for it was God's punishment for his evil living, and the only safeguard was religious faith ; when lunatics had a peculiar penetrating smell, valuable in the diagnosis of insanity ; when Cox's swing, with its twirling rope, was an efficient

substitute for the sea voyage; when by centrifugal force the rotating bed, with its forty to sixty revolutions per minute, improved the circulation of the blood in the brain; and when delusions were combated by argument and persuasion, by Belshazzar-like writings in luminous paint upon the wall, or bogus surgery for the extraction of snakes from the abdomen. It is an oft-told story, but one that we do well to remember. While duly recognising the great things accomplished in England and France, Kraepelin naturally pays chief attention to the course of affairs in his own country, and he gives copious quotations from German writers of former days.

Speaking of the present position, he says that though in the matter of psychiatric clinics Germany is far ahead of other countries, the connection between clinics and asylums has unfortunately become too much loosened, and the attractions of the clinics increase the risk that the asylums may lose touch with scientific work. He strongly condemns any attempt to separate curable from incurable patients. He points out that transfer of a patient from one institution to the other is often a cruelty to his relatives and to himself, that amongst supposed incurables recovery is not at all rare, and that incurables are valuable and often indispensable members of the institution community. For these reasons patients in institutions are rightly classified only according to their behaviour and their needs, not according to the form of their malady or their prospects of recovery.

In condemning seclusion (which is largely responsible for the production of those "asylum artefacts" that are the horror of every alienist), Kraepelin says that for fifteen years he has been able to dispense with it altogether, and it would be entirely avoidable in large institutions if all patients had previously been treated without it. He refers to the efforts of Wattenberg, Heilbronner and Hoppe for the entire abolition of single rooms, and says that the chief obstacle to this is the cost of the extra staff required.

SYDNEY J. COLE.

Some Factors in Psychotherapy. (Journ. of Neur. and Psycho-path., August, 1920.) Brown, W.

The writer found during the war that about 15 *per cent.* of the psychoneuroses treated in the field were cases which showed the working of isolated psychological factors, with a resulting amnesia for events immediately following upon the shell explosion or other emotion—exciting incident. Accompanying this amnesia were functional physical symptoms—mutism, deafness, paralysis, etc. The physical symptoms tended to disappear more readily—under the influence of rest, explanation, rational persuasion, etc.—when these lost memories were restored under light hypnosis, than if the amnesia were left untreated. The reintegration of the mind increases the power to grapple with the physical symptoms.

When the accompanying emotion (fear) along with the missing memories was recalled in its original vividness the patient passed into a "second" state in which he was free from all his physical symptoms. The emotion was worked off as completely as possible (the process of abreaction), and post-hypnotic suggestion was given to the effect that

he would continue to remember what he had just experienced. A complete recovery resulted in many cases. In those cases where only partial recovery took place, it would seem that the patient had not adequately worked off his fear; that there was an actual persistence of a past emotion in the unconscious under certain conditions of conflict and repression.

The writer rarely uses light hypnosis except where gross amnesias of a hysterical nature occur, as in many war cases. In civilian practice waking suggestion, persuasion and mental analysis suffice. The term "autognosis" (self knowledge) is used where the patient gains an ever-deepening insight into the exact nature of his mental condition. He is encouraged to describe his feelings and thoughts at the time of the outbreak of his symptoms, his hopes and fears for the future, his regrets for the past. In this process he will display emotions of one kind or another from time to time (psychocatharsis). He is encouraged to look at his wishes, interests, ambitions, etc., from all points of view, to adjust them to one another, and to seek out and eliminate contradictions. This kind of intellectual work strengthens the healthy part of the mind and cuts the ground from under the symptoms. This method is applicable to all forms of psychoneurosis, and should be used even if the symptoms have already been removed by other causes.

The writer would call a case a Freudian one when its analysis brings to light an œdipus complex, or very early memories of excessive interest in the excretory functions, of sadism, masochism, exhibitionism, etc., which have subsequently given rise to mental conflict followed by repression.

Emphasis is laid on the factor of suggestion as a *vera causa* in psychotherapy. Every case of enuresis which the writer has treated has been cured by suggestion even when analysis and persuasion have failed.

C. W. FORSYTH.

5. Pathology.

The Reproductive Glands and Mental Disorder with Special Reference to Dementia Præcox. (State Hosp. Quart., February, 1921.) Kirby, G. H., and Gibbs, C. E.

Pathological Changes of the Testes and Ovaries in Dementia Præcox. (State Hosp. Quart., February, 1921.) Tiffany, W. J.

Constitutional types have both somatic and psychic components. Physical make-up should be studied in connection with mental make-up. The study of the endocrine glands in the psychoses is important. Defective development and function of the sexual organs is definite in certain psychoses and is associated with disturbances in the psycho-sexual sphere. The endocrine glands related to the sex function and development are the anterior lobe of the pituitary, the adrenal cortex, and the pineal. As regards the thymus evidence is conflicting. The removal of parts of the anterior lobe of the pituitary, tumour and conditions of diminished function are followed by atrophy of sex glands, whilst feeding with the anterior lobe stimulates sex development. Pregnancy produces hyperplasia of the anterior lobe and castration is

followed by hypertrophy. Feeding with adrenal cortex produces hypertrophy of testes, and there are frequently found pathological changes in the cortex in disturbed sex development and function.

There is a close relation between the interstitial cells of the testes, secondary sex characteristics and normal sex activity. Cryptorchid testes have abundant interstitial cells, secondary sex characteristics and libido without the development of the seminiferous tubules. Deficient secondary sex characteristics are often associated with deficient or early failure of sex function.

The author does not imply that the demonstration of sex deficiency in a significant number of cases would establish it as a fundamental etiological factor in the psychoses. This may be but one evidence of a deeper and more fundamental defect of body make-up or function. There is evidence that disturbed pituitary function is a part of, or dependent upon, other fundamental deficiencies or disturbances of development or metabolism. The relation of infection to certain psychoses remains to be determined. Infection might produce a psychosis by direct toxic action or by upsetting endocrine balance and metabolism. The establishment of some relation between sex-deficiency and the psychosis would be a very definite and encouraging advance.

The authors advocate a careful collection of data from the history, clinical examination and autopsy. They examined 313 cases to determine whether by simple physical examination of the male genitals any gross differences between dementia præcox and other psychoses existed. The testes were palpated for size and consistency. The dementia præcox cases showed the highest rate of variation in size although the differences were not very great. The cases of general paralysis and dementia præcox showed a definitely higher rate of changes in consistency, chiefly softening, than did the manic-depressive. The softening in general paralysis was thought to be more marked than in dementia præcox. Various other deficiencies were observed, but no very great differences in the three groups were noted except that the penis was considered to be small or short in 59 *per cent.* of the cases of dementia præcox and 40 *per cent.* of general paralysis, but in only 28 *per cent.* of the manic depressives.

Tiffany examined 87 cases—the testes from 40 males and the ovaries from 47 females. These included many types of psychoses. Small testes seemed to occur more frequently in this series in dementia præcox, general paralysis and the senile psychoses than in the other cases. The gross appearances and the consistency of the testes are not always indices of the amount of interstitial connective tissue and sclerosis of the seminiferous tubules. In all the dementia præcox cases the microscopical examination of testes showed an increase of interstitial tissue with the exception of two cases. But this increase was not common alone to the dementia præcox cases; it also was present in the other cases of the series with the exception of two cases of general paralysis, one of cerebral syphilis and one case of drug psychosis.

Therefore dementia præcox cases do not show a more marked tendency to interstitial connective-tissue increase than do other cases in this series. The interstitial cells of Leydig are generally diminished in size and number throughout this series in all types of psychoses. The

author thinks there is a little more atrophy and loss in these cells in dementia præcox cases. He describes the various changes in the seminiferous tubules. All stages of regression were found in the various types of cases. All the dementia præcox cases with one exception showed reduction or complete absence of spermatogenesis. The earlier the psychosis developed the greater the tendency to loss or reduction of sexual function. There was probably a greater loss of spermatogenesis in dementia præcox cases than in the others if the seniles and arteriosclerotics were ruled out. As regards the ovaries, none of these were normal in the dementia præcox cases under fifty years old (those over fifty were ruled out). There is an apparent great loss of function in dementia præcox cases which develop early in maturity.

W. J. A. ERSKINE.

Pathological Anatomy of Idiocy: Two Cases of Hydrocephalus Internus [*Des lésions anatomo-pathologiques de l'idiotie: deux cas d'hydrocéphalie interne*]. (*L'Encéphale*, January 20th, 1921.) *Hoven, Henri*.

Only in a minority of cases is idiocy due to a simple arrest of cerebral development. More often it results from some process of disease, an encephalitis or meningo-encephalitis that has attacked the brain at some time in the course of its growth. As idiocy, being produced in various ways, has no characteristic pathological anatomy, *post-mortem* examination of idiots' brains is always interesting and yields many surprises.

The first of the two cases here reported is that of an epileptic idiot woman who died at the age of forty. There was atrophy and contracture of the right upper limb, and atrophy of the right lower limb, with a paralytic club-foot. There was some cranio-facial asymmetry, the left half of the head being smaller than the right. The cranial wall was normal, except in the left parietal region; here it was much thinned, its inner surface was rough, and here the dura was absent over an area as big as a five-franc piece. The finer membranes show whitish, opaque, sclerosed plaques. The left cerebral hemisphere is much smaller than the right. Its gyri are small, the sulci shallow; of the fissure of Sylvius only the anterior part is present. This hemisphere somewhat resembles a cystic tumour. The author's drawings of coronal sections through the whole cerebrum show the left lateral ventricle enormously dilated into a vast cavern, in whose thin wall of grey and white matter are many cystic spaces of irregular shape. Into some of these spaces the membranes and vessels have intruded. The left foramen of Monro is wide, the corpus callosum thin. The relations of the caudate and lenticular nuclei, optic thalamus and amygdaloid nucleus to the lateral ventricle cannot be briefly epitomised, but are interesting as showing an arrest of cerebral development at a stage prior to that at which the central grey masses fuse with the outer cerebral wall; more precisely, there has been a deviation of development, for the brain has continued to develop, though in an insufficient and irregular fashion. Deviation of development is shown also by the presence of islets of nerve-cells in the white matter. In addition there are pronounced evidences of an inflammatory process—meningitis, choroiditis, degeneration of nerve-cells and nerve-fibres, glia proliferation, sclerosis of gyri, and local

destructions of brain tissue leaving cystic spaces. To the inflammatory process—which is ancient—is due the local atrophy of the dura and cranial wall. Though the internal hydrocephalus is largely consequent upon an alteration of permeability of the choroid plexus, the cerebral lesions are not simply of a mechanical order; they are mainly due to a meningo-encephalitis.

The second case; somewhat similar, is more briefly reported.

SYDNEY J. COLE.

Structural Changes in a Thyroid Lobe removed by Operation in a Case of Agitated Melancholia [*Modifications considérables de la structure d'un lobe thyroïdien extirpé chez une malade atteinte de mélancolie anxieuse*]. (*L'Encéphale*, January 20th, 1921.) Parhon, C. J., and Stocker, Alice.

That there is a close relation between mental functions and those of endocrine glands, especially the thyroid, we cannot doubt. We need but call to mind the mental abnormalities of endemic cretinism, myxœdema, and Graves' disease. The psychoses that so often arise in Graves' disease take usually the form of mania or melancholia—an observation which has suggested that mania, melancholia, and manic-depressive disorders in general, originate in many cases from an excess or perversion of thyroid activity. In favour of this suggestion we are bidden to note—besides the co-existence of such psychoses with Graves' disease—their much greater frequency in women, their association with epochs at which there is a modification of glandular equilibrium (puberty, pregnancy, the puerperium, the menopause), the frequency of ovarian insufficiency in melancholia, the antagonistic relations between the ovaries and the thyroid, the disturbances of general nutrition, the frequency of arterial sclerosis in manic-depressive disorders, the mononuclear leucocytosis observed in some cases, the high average weight of the thyroid in these psychoses, and the hyperexcitability of the vegetative nervous system observable in these psychoses as in hyperthyroid states.

The woman whose case is here reported was forty years of age. She had had ten full-time confinements and two miscarriages. Five of her children had died in infancy. Menstruation had been regular until the spring of 1919, when she suffered an emotional shock. A man came into her house one day who had been severely stabbed in a brawl. He told her what had happened, and then, having hardly left the house, fell down in the street and expired. Called, with her husband, to give evidence at the inquest, "elle prêta serment sur ses enfants." She felt remorse for this, and thereupon the mental disorder developed. She made two attempts at suicide. She was restless, wandering about, wringing her hands, biting her lips and fingers, and continually uttering self-reproaches, saying that she had committed sins of unparalleled enormity, that she had ruined her children, that she had never been wife or mother, that she deserved neither to live nor to die, that she and her children were doomed for two hundred years to eat no bread, that she was the Devil, and that she would never die but burn in everlasting fire. She was well orientated for time and space, and was able to sustain some connected conversation, but

otherwise took little notice of her surroundings, being too intent on her woes.

On January 28th, 1920, at the request of her husband, who had heard good reports of such procedures, the right lobe of the thyroid was removed by operation. The lobe was not bulky, its weight being 5.5 gm. It was of a deep red colour, very congested, and extremely vascular. The capillaries were all engorged and dilated, and formed a rich network round the follicles. In many follicles there were recent hæmorrhages. The colloid was reduced in quantity, and generally very fluid, but in nearly all the follicles there were blocks of basophile colloid, consisting of extravasated corpuscles agglutinated into a homogeneous mass. Octahedral crystals were present, staining like this basophile colloid, and resembling the crystals described by Buscaino in epileptics and general paralytics. The follicles were in some places large, in others rather small. Their lining cells were mostly cubical and were very rich in lipoid granules. There was no sclerosis. The authors opine that the thyroid changes, being recent (some of them quite recent), had not preceded the psychic disturbance, but had followed it, though a disposition of the gland to such changes may have existed previously.

The operation seemed beneficial. The patient went out on leave on February 18th, 1920, and continued to improve at home. She has not been seen since, but is believed to have made a good recovery.

The authors review the literature of thyroid changes in melancholia, and give forty references.

SYDNEY J. COLE.

Phenolsulphonephthalein Absorption from the Subarachnoid Space in Paresis and Dementia Præcox. (*Arch. of Neur. and Psychiat.*, January, 1921.) Weston, P. G.

The writer reports observations on twenty-eight cases of katatonic dementia præcox and seventeen cases of general paralysis. One c.c. of neutral sterilised solution of phenolsulphonephthalein having a specific gravity of 1.0061 was injected into the lumbar subarachnoid space, and the contents of the needle washed into the canal with 15 c.c. of previously withdrawn spinal fluid. The time of appearance of the dye in the urine was then noted. Age, mental and physical condition and duration of the psychosis had, so far as could be determined, no constant effect on the appearance time. In all cases the dye was longer in making its appearance in the urine than the normal time stated by Dandy and Blackfan (6 minutes) and by Mehrtens and West (4 to 10 minutes). In the writer's observations the time varied from 12 to 68 minutes in the paralytics and from 25 to 104 minutes in the dementia præcox cases. It appears that the absorption of the dye takes place from the lumbar region. Dye injected into the lumbar subarachnoid space in the dead body does not (at least, within one hour) diffuse to other regions of the spinal canal. The dye was not found in fluid drawn from the cisterna magna, in some selected cases of dementia præcox and of general paralysis, at any time up to five hours after it had been injected into the lumbar subarachnoid space. The dye is not reduced by the spinal fluid *in vitro*, and perhaps is not reduced by it

in the spinal canal. After intramuscular injection in the writer's cases, the time of appearance in the urine varied from 9 to 20 minutes in the paralytics and from 4 to 20 minutes in the dementia præcox cases.

SYDNEY J. COLE.

Syphilis and Degeneration. (*Journ. of Nerv. and Ment. Dis.*, January, 1921.) Thom, B. P.

The writer holds that syphilis and alcohol are the principal causative factors of degeneracy, and that hereditary syphilis accounts for many cases of idiocy, imbecility, juvenile paresis, mental deterioration, severe hysterias, obsessions, sexual perversions, eccentricities, physical and moral degeneracy. It is even suggested that the endogenous psychoses may be ultimate results of hereditary syphilis.

The failure of the cerebral blood supply in hereditary syphilis prevents each determinant from obtaining its rightful share, and hence its immaturity and unevenness which accounts for the individual's lack of control and consequent tendency to crimes of impulsion and emotion.

Bourdeau found that 16 *per cent.* of male and 33 *per cent.* of female criminals gave a positive Wassermann. Out of 204 cases of low-grade idiots, the blood reacted positively in 34 *per cent.*

Transmission of the disease may occur in the following ways: (1) The *Spirochæta pallidum* may be transmitted directly from the syphilitic mother. (2) Syphilis of the parents may so affect the germ-cells by the toxins generated by the spirochætes that the child may abort, or be born prematurely or be marasmic and puny. The Wassermann reaction of such a child will be negative. (3) A child of syphilitic parents may show no signs of syphilitic disease, yet it may have one or more siblings who are infected. Fournier found that in maternal syphilis 84 *per cent.* of the offspring were affected, in paternal syphilis only 37 *per cent.*

C. W. FORSYTH.

Puncture of the Cisterna Magna. (*Arch. of Neur. and Psychiat.*, November, 1920.) Ayer, J. B.

Cases arise where lumbar puncture is inefficient or impracticable, and access to the upper reservoirs of cerebro-spinal fluid is imperative. To reach the subarachnoid space in these loci thoracic, cervical, and intra-ventricular puncture, or puncture through the sphenoidal fissure, have been advocated. But cisterna puncture is not adduced, though long in vogue for collection of fluid in animals, and used by surgeons for drainage. Yet the latter route reaches a site of great strategic value, and may often obviate the intra-ventricular method. Other alternatives seem hazardous. Preliminary investigation on the cadaver suggested ready practicability, and in subsequent practice the procedure has proved easy and free of alarming symptoms, whether immediate or remote. Forty-three punctures were performed in twenty cases for diagnosis or treatment of post-meningitic block, epidemic meningitis, cerebral syphilis, and cord compression. The technique is fully described. The operation is reported as no more difficult than the lumbar method, especially if preceded by practical experience at

necropsy. Simultaneous comparison by manometer was made in both cisterna and lumbar regions. The author deduces from the results: (1) That the cistern and lumbar fluids are normally identical for protein, sugar, cells, and colloidal gold reactions; (2) that variation in either is pathological and should have significance; (3) that the manometric pressures are the same; (4) that the subarachnoidal space is normally a free channel of communication.

Favourite sites for adhesions in neglected meningitis are in the thoracic meninges and about the foramen magnum. Successful treatment is described by intra-cistern administration of the patient's own serum; and, incidentally, by combined intra-ventricular and cistern puncture patency of the velum medullare was demonstrated. The mortality of epidemic meningitis is reduced by serum treatment, but only to 25 *per cent.* Various reasons are advanced, but presumably the chief cause is that the serum fails to reach the principal lesions in sufficient concentration. Substances administered by the lumbar route (even 20 c.c.) do not reach higher than the base of the brain; a similar amount into the cisterna magna not only surrounds the base but also penetrates to the cerebral cortex bilaterally. The cistern route, then, would appear the method of choice. In four cases of late cerebral syphilis 20 c.c. undiluted serum have been given by cisterna method, special precaution being taken to alter pressures very slowly. Definite deductions are not justified, but the results encourage further trial. As regards compression of cord, there is recognised difficulty in diagnosing tumour or cyst of cord as against cord degeneration. Below the area of compression fluid may be normal, but usually presents abnormality. It is hoped that comparative findings (made possible by the present method) in the fluid above and below a compressed area of cord may result in the acquirement of significant phenomena.

JOHN GIFFORD.

Epidemic (Lethargic) Encephalitis: Cultural and Experimental Studies; Preliminary Communication. (Arch. of Neur. and Psychiat., February, 1921.) Thalheimer, W.

This report presents evidence believed by the author to be confirmatory of the results of Loewe and Strauss with respect to the filtrability of the virus obtained from cases of lethargic encephalitis and the specific nature of the filtrable organism cultivated by those investigators.

The author took pieces of the brain of four cases of the disease which ended fatally, the diagnosis being confirmed by a microscopic examination of the brains. He also took spinal fluid from two cases, one a fatal fulminating case, the other from a patient convalescing from a long attack.

Pieces of the central nervous system were ground up in a sterile mortar with sterile sand to make a milky emulsion and filtered through a Mandler clay filter which had previously been found to hold back *B. prodigiosus*. The filtrates were injected into rabbits through the thin temporal plate. Large numbers of the rabbits showed at necropsy typical and marked microscopic lesions identical with those found in fatal human cases. Filtrates prepared from rabbits' brains by the method used originally for the human brain were injected into a further

series of rabbits, and two strains of virus have been passed through six series of animals, with filtration through a Mandler clay filter after each passage.

The organism was cultivated on ascitic fluid tissue culture medium used by Noguchi for spirochaetes and other organisms. The organism stains a violet-blue with methylene blue; with Giemsa it stains purplish; it is extremely minute, spherical, and is about one-fourth to one-fifth the diameter of a small anhemolytic streptococcus; it is found singly, in pairs, short chains or groups, and is uniform in size. Cultures of this organism have been found secured from Mandler filtrates of the C.N.S. of the four cases mentioned, and directly from the two spinal fluids; some of these cultures have been successfully subcultured six times; the organism has been grown from the brains of about 80 *per cent.* of the rabbits inoculated with filtered virus; it has also been recovered from brains of rabbits inoculated with cultures of the organism. Control studies throughout the investigation were uniformly negative.

These investigations agree with the work of Loewe and Strauss; the author believes that the organism he has found is identical with that found by those observers and that it is the etiologic agent of epidemic encephalitis.

L. H. WOOTTON.

Part IV.—Notes and News.

MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

THE QUARTERLY MEETING of the Association was held at the Maudsley Hospital, Denmark Hill, London, on Tuesday, June 7th, 1921, Dr. W. F. Menzies (President), in the chair.

Members present: Dr. W. F. Menzies (President), Major R. Worth (General Secretary), Sir H. Bryan Donkin, Sir F. W. Mott, Sir Maurice Craig, Drs. W. H. Bailey, J. Bain, H. M. Baker, F. Beach, D. Bower, C. H. Bond, A. Helen Boyle, W. Brown, W. M. Buchanan, J. Chambers, R. H. Cole, S. J. Cole, E. P. Court, S. Coupland, A. W. Daniel, W. R. Dawson, F. Dudley, F. H. Edwards, H. Eggleston, R. L. Langdon-Down, R. R. Leeper, E. Lewis, T. C. Mackenzie, E. Mapother, S. E. Martin, J. McClintock, J. Middlemass, A. Miller, G. E. Miles, J. M. Moll, H. J. Norman, E. S. Passmore, A. A. W. Petrie, D. F. Rambaut, D. Ross, J. N. Sergeant, G. E. Shuttleworth, R. P. Smith, J. G. Soutar, R. H. Steen, J. Stewart, R. J. Stilwell, E. B. White, J. L. Wilson, Marguerite Wilson, and A. H. Trevor, Esq.

Visitors: John J. Briscoe, E. Casson, C. M. Tuke, H. C. Waters.

Members present at the Council Meeting: Dr. W. F. Menzies (President), Major R. Worth (Secretary), Sir Maurice Craig, Sir F. W. Mott, Drs. C. H. Bond, D. Bower, W. M. Buchanan, J. Chambers, R. H. Cole, A. W. Daniel, R. R. Leeper, T. C. Mackenzie, A. Miller, J. Noel Sergeant, G. W. Smith, J. G. Soutar, R. H. Steen.

The GENERAL SECRETARY (Major R. Worth) announced that letters regretting inability to attend had been received from Dr. J. P. Westrup, Dr. R. C. Stewart, Dr. R. Eager, Dr. G. Douglas McRae, Dr. T. S. Good, Lieut.-Col. J. R. Lord, Dr. G. N. Bartlett, and Dr. C. C. Easterbrook.

The minutes of the last meeting, having been duly published in the Journal, were taken as read, and duly confirmed.

MATTERS ARISING OUT OF THE COUNCIL MEETING.

The PRESIDENT said that the Educational Committee some time ago decided that the written examination for nurses should be held before 10 a.m. Some difficulty had arisen in that medical superintendents were not aware of that rule, and the Registrar had now been requested to print, in heavy type, in red ink on the outside of the envelope, the words: "This Examination must be held before 10 a.m.," the date being already given. The Registrar was also preparing a circular containing the general changes which had occurred in the nursing examination, as adopted by the Association in the last year or two, in order that a more extended knowledge of them might be sent round to all medical superintendents. He mentioned next matters involving the expenditure of funds. The great increase in the number of candidates for the Preliminary, especially, had led the Education Committee and the Council to think that the assistant medical officers who conducted the Preliminary Examination were not adequately remunerated. The present rate came to something like sixpence per candidate, which, it would be agreed, was somewhat beneath the dignity of the medical man to accept. But the present congestion of candidates, over 2,000 in number, would not continue indefinitely, so that all the Council could do was to suggest that the Association grant the sum of £60 in addition to the existing remuneration, so that these examiners should, for this year of such a large entry, be paid another £20 each.

This was agreed to.

A further item involving expenditure of funds was that the Handbook Committee found themselves in financial difficulties. They had been allowed travelling expenses, but there were such extra costs as typing, as everyone had not a clerk to do this work. Literary consultation was also necessary. The Committee, therefore, asked for a certain sum, not exceeding £30, for incidental expenses in connection with the preparation of the Handbook; for such items as typing, postages, and literary consultations generally with outside literary persons.

This was also agreed to.

Arising out of the work of the Parliamentary Committee, the Council had under consideration especially, in connection with an amendment in the Superannuation Act, the question of the great inequality which existed in Scotland between the staffs of the Royal Asylums and the District Asylums in that country, and they had instructed the Sub-Committee which was appointed for that purpose to carefully watch any legislation, and enjoin on the Minister responsible the necessity for including all classes, and equalising the treatment in regard to pensions of the staffs of these two classes of asylums. He did not suppose anything would be done in the matter at present, because all these schemes had been overthrown; but, if the meeting was agreeable, the Council wished that matter to be put forward.

ELECTION OF NEW MEMBERS.

Dr. DONALD ROSS and Dr. STILWELL were nominated scrutineers for the ballot, and the following were elected unanimously:

THOMAS, CYRIL JAMES, M.R.C.S., L.R.C.P.Lond., House-Physician, Bethlem Royal Hospital, Lambeth, London, S.E. 1.

Proposed by Drs. J. G. Porter Phillips, Thomas Beaton and James Wood.

NICOLL, JAMES, M.D.Edin., D.P.H.Lond., Medical Superintendent, Fountain Mental Hospital, Tooting Grove, S.W.

Proposed by Lieut.-Col. J. R. Lord, and Drs. R. Worth and G. Warwick Smith.

THOMPSON, JAMES ARTHUR, B.A., M.B., B.Ch.Dubl., Surgeon-Commander, R.N.; Royal Naval Hospital, Haslar.

Proposed by Drs. H. Devine, F. E. Stokes and R. Worth.

POYNTER, ERNEST GEORGE THORNTON, M.R.C.S., L.R.C.P.Lond., A.M.O., Long Grove Mental Hospital, Epsom, Surrey.

Proposed by Drs. D. Ogilvy, V. Lindley Connolly and Edward Mapother.

ANDERSON, WILLIAM, M.B., Ch.B.Aberd., Senior Assistant Physician, Aberdeen Royal Asylum.

Proposed by Drs. R. Dods Brown, H. de M. Alexander and William M. Buchanan.

COOPER, ALEXANDER, M.A., M.B., Ch.B.Aberd., Junior Assistant Medical Officer, Aberdeen Royal Asylum.

Proposed by Drs. R. Dods Brown, H. de M. Alexander and William M. Buchanan.

The SECRETARY gave the particulars regarding the Annual Meeting to be held in London on July 12th and 13th, and asked members to properly intimate their intention to be present at the functions, or otherwise, as an early intimation greatly facilitated the many arrangements contingent on the meetings. The company at the Dinner at Connaught Rooms would probably include the Lord Chancellor, the Minister of Health and other important persons. The Visiting Committee of Springfield Mental Hospital invited about twenty members of the Association to bed and breakfast on the days of the annual meeting, and those who accepted would require to be, *pro tem.*, bachelors. This year's meeting would probably be an epoch-making one, and the hearty co-operation of the members generally was solicited.

THE SECOND MAUDSLEY LECTURE.

Sir FREDERICK MOTT, K.B.E., F.R.S., then delivered the Second Maudsley Lecture (*vide* p. 319), at the conclusion of which a cordial vote of thanks was carried with acclamation.

SOUTH-WESTERN DIVISION.

THE POSTPONED SPRING MEETING of the Division was held, by the courtesy of Dr. MacBryan, at 17, Belmont, Bath, on Friday, May 20th, 1921.

The following members were present: Drs. Aveline, Blachford, Cole, Lavers, MacBryan, Nelis, Phillips, Thomas and Bartlett (Hon. Divisional Secretary).

Dr. Nelis was voted to the Chair and the minutes of the last meeting were read and signed.

Letters of regret for non-attendance were received from Drs. Buchanan, Devine, MacDonald, Neil, McRae, Rutherford, Slaney, Starkey and Westrup.

Regret was expressed that the meeting at Ashhurst was prevented by the curtailment of the train service owing to the miners' strike.

Dr. Bartlett was re-elected Hon. Divisional Secretary.

Drs. Good and Soutar were elected as Representative Members of Council.

Dr. N. R. Phillips and Dr. Aveline were elected members of the Committee of Management.

The date of the Autumn Meeting was fixed for Friday, October 28th, 1921, Dr. Blachford kindly inviting the Division to the Bristol City Mental Hospital, Fishponds. The date of the Spring Meeting, 1922, was fixed as April 28th.

The meeting was concluded by impromptu discussions on the political representation of the Association, the Unemployment Insurance scheme, and the substitution of coal by oil in mental hospitals.

IRISH DIVISION.

THE SPRING MEETING of the Irish Division was held on April 7th, 1921, at Richmond Asylum, Dublin, by kind invitation of Dr. J. O'Connor Donelan.

Members present: Dr. J. O'Connor Donelan (in the Chair), The Rt. Hon. M. F. Cox, Drs. W. R. Dawson, V. C. Ellis, H. M. Eustace, L. Gavin, T. A. Greene, M. J. Nolan, F. E. Rainsford, H. R. C. Rutherford, and R. R. Leeper (Hon. Divisional Secretary).

Letters of apology for unavoidable absence were read from J. M. Colles, Esq., K.C., and Dr. J. Mills, Ballinasloe.

The minutes of the previous meeting were read and signed.

The Hon. Secretary was directed to forward a resolution from the meeting to

Dr. J. Mills, Ballinasloe, expressing to him the sympathy of the members upon his recent bereavement.

A letter was read from Dr. C. E. Hetherington, Londonderry, resigning his membership, and expressing his regret at being compelled to take this step owing to his retirement from active medical work.

The meeting heard of Dr. Hetherington's resignation with great regret, and the Hon. Secretary was directed to write and request Dr. Hetherington to reconsider the matter.

The meeting next proceeded to the election of an Honorary Secretary and two representative members of Council for the ensuing year.

Dr. F. E. Rainsford having been appointed scrutineer and a ballot having been taken, it was announced by the Chairman that Dr. R. R. Leeper was elected Hon. Secretary, and Drs. J. C. Martin and H. R. C. Rutherford were elected representative members of Council for the ensuing year.

A hearty resolution, expressing appreciation of the services of the Hon. Secretary, was passed, and Dr. Leeper returned his thanks to the members for their kindness in again electing him.

The members next proceeded to fix the dates of meetings for the ensuing year. The Autumn Meeting was arranged to take place on Thursday, November 3rd, 1921, and the Spring Meeting to take place on Thursday, April 6th, 1922. The Summer Meeting was fixed for Thursday, July 6th, 1922, and the place of meeting for the forthcoming Summer Meeting was discussed, but not definitely decided upon.

The report of the Irish Public Health Council was next considered and discussed, as directed by the Autumn Meeting, and the notice of motion handed in by Drs. F. E. Rainsford and J. Mills, a copy of which had been sent to each member of the Division, was also considered.

After a lengthy discussion the following resolution, proposed by Dr. F. E. RAINSFORD, and seconded by Dr. M. J. NOLAN, was unanimously passed, and the Hon. Secretary was directed to send a copy to the Chairman of the Irish Public Health Council:

"That the Irish Division of the Medico-Psychological Association, having considered the Report of the Irish Public Health Council, desires to express its regret that, in dealing with the future of the asylum service of the country, the Council had not the advantage of a representative of that service among its members, which would in their opinion have been of great value in its deliberations. They desire, however, to submit the following resolutions, which have been passed unanimously:

(1) "That the Members of the Irish Branch of the Medico-Psychological Association, on consideration of the report of the Irish Public Health Council, are strongly of opinion that in the matter of the organisation of the Ministry the alternative proposal (B) would be in every way the more suitable from considerations of efficiency, economy, and administration."

(2) "That they approve generally of the establishment of Health Councils for each county in Ireland."

(3) "That they approve of the establishment of a State Medical Service, centrally appointed and centrally controlled, which service will include Lunacy Administration."

(4) "That, as regards cost of maintenance of asylums, they are of opinion that the State should bear half the cost of maintenance, as is proposed in the case of the other Public Health and Medical Services."

A cordial vote of thanks to Dr. J. O'Connor Donelan for his kindness and hospitality was proposed, seconded, and passed by acclamation.

This terminated the proceedings.

CLINICAL CHART FOR MENTAL CASES.

By Prof. R. HUNTER STEEN, M.D., F.R.C.P.

The chart, a copy of which is published herewith, has proved useful in the City of London Mental Hospital, and a few words explaining its origin may be of interest.

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LXVII.

MONTH		DAY																									
<div> <div>SLEEP</div> <div>IN</div> <div>24 HOURS</div> </div>				<div> <div>0</div><div>1</div><div>2</div><div>3</div><div>4</div><div>5</div><div>6</div><div>7</div><div>8</div><div>9</div><div>10</div> </div>																							
<div>HOURS OF SLEEP DURING DAY</div>				<div> <div> <div>Extreme Excitement</div> <div>Excitement ...</div> <div>Restlessness ...</div> <div>Normal ...</div> <div>Slight Retardation ..</div> <div>Great "</div> <div>Stupor...</div> </div> <div> <div>Exaltation ...</div> <div>Slight "</div> <div>Normal ...</div> <div>Slight Depression ...</div> <div>Great "</div> </div> </div>																							
<div> <div>MENTAL</div> <div>Motor</div> <div>Emotion</div> </div>				<div> <div>BOWELS</div> <div>WEIGHT- Pounds</div> </div>																							
<div> <div>TREATMENT</div> <div>OR</div> <div>NOTES</div> </div>																											

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For many years it has been the custom here to keep a sleep chart for each admission. This is no doubt the practice in other institutions, and is valuable for two reasons. In the first place it draws the attention of everyone concerned, doctors and nurses, to the sleep of the patient, and insures that sleeplessness, if it exists, receives adequate treatment. Secondly, as it is the rule to state on the chart the hypnotic used, a readily accessible record is obtained of the value of different hypnotics. The foundation, then, of the present chart is the portion dealing with sleep.

Certain patients complain of insomnia, meaning thereby that they sleep badly at night, whereas the total hours of sleep may not be at all abnormal. It will be seen that the chart states, "Sleep in twenty-four hours," which is the important point to ascertain. Still, it is well to be aware of how much sleep occurs in the daytime, and a place is reserved for this. It will be noticed that when sleep is deficient the daily dots will appear high up, and when sleep is abundant the dots will be lower down. It thus resembles a temperature chart, *e.g.*, when sleep is bad the chart looks like one of pyrexia, and when sleep is good the chart has the appearance of a normal temperature chart. This arrangement is usual in sleep charts.

The next portion of the chart affords the opportunity for recording whether there is motor restlessness or the opposite, and whether depression or exaltation is present. It is admitted that the designation appropriate to the conditions of a given patient is open to the error of the personal equation of the recorder. For example, different people might not agree as to whether a patient was "restless" or "excited" or "extremely excited." In practice, however, it is found that an intelligent nurse can manage to complete the record satisfactorily.

Provision is made for recording the state of the bowels and the weight of the patient. The presence of constipation has a marked influence both on the amount of sleep obtained and the general mental condition of the patient.

As regards the weight of the patient, this will not of course be taken daily, but weekly weighing is usual in acute cases.

Taking the chart as a whole, the criticism may well be expected that it is too small in size to be of value. In reply it may be stated that the idea was to make it fit the ordinary temperature chart holder, and in practice it is found that a neat writer can keep it in a satisfactory manner.

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EDUCATIONAL NOTES.

A COURSE OF LECTURES and Practical Instruction for the Diploma in Psychological Medicine, granted by the various Universities, will be given at Bethlem Royal Hospital, commencing early in October next.

Syllabus and particulars can be obtained from the Physician-Superintendent, Bethlem Royal Hospital, S.E. 1.

The following lecturers have been appointed:

Neurology: S. A. Kinnier Wilson, M.A., M.D., F.R.C.P., C. C. Worster Drought, M.D., M.R.C.P., F. C. E. Danvers Atkinson, M.B.

Psychology: W. H. R. Rivers, F.R.S., M.A., M.D., F.R.C.P., William Brown, M.A., M.D.

Mental Deficiency: A. F. Tredgold, M.D., F.R.S. Edin.

Psychological Medicine: Sir Maurice Craig, C.B.E., M.D., F.R.C.P., Eric D. Macnamara, M.D., F.R.C.P., W. H. B. Stoddart, M.D., F.R.C.P., Prof. R. Hunter Steen, M.D., F.R.C.P.; J. G. Porter Phillips, M.D., M.R.C.P., T. Beaton, O.B.E., M.D., M.R.C.P., H. E. Wingfield, M.D., Clement Lovell, M.D.

APPOINTMENTS.

Robinson, William, M.B., Ch.B. Leeds, Medical Superintendent, County Mental Hospital, Brentwood, Essex.

Yellowlees, Henry, O.B.E., M.D., F.R.F.P. & S. Glasg., Medical Superintendent from March, 1922) of the Retreat, York.

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M. J. EISLER.—Womb and Birth Phantasies in Dreams.

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THEODOR REIK.—The Science of Religion.

HANNS SACHS.—Æsthetics and Psychology of the Artist.

THEODOR REIK.—Mythology.

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BOOK REVIEWS.

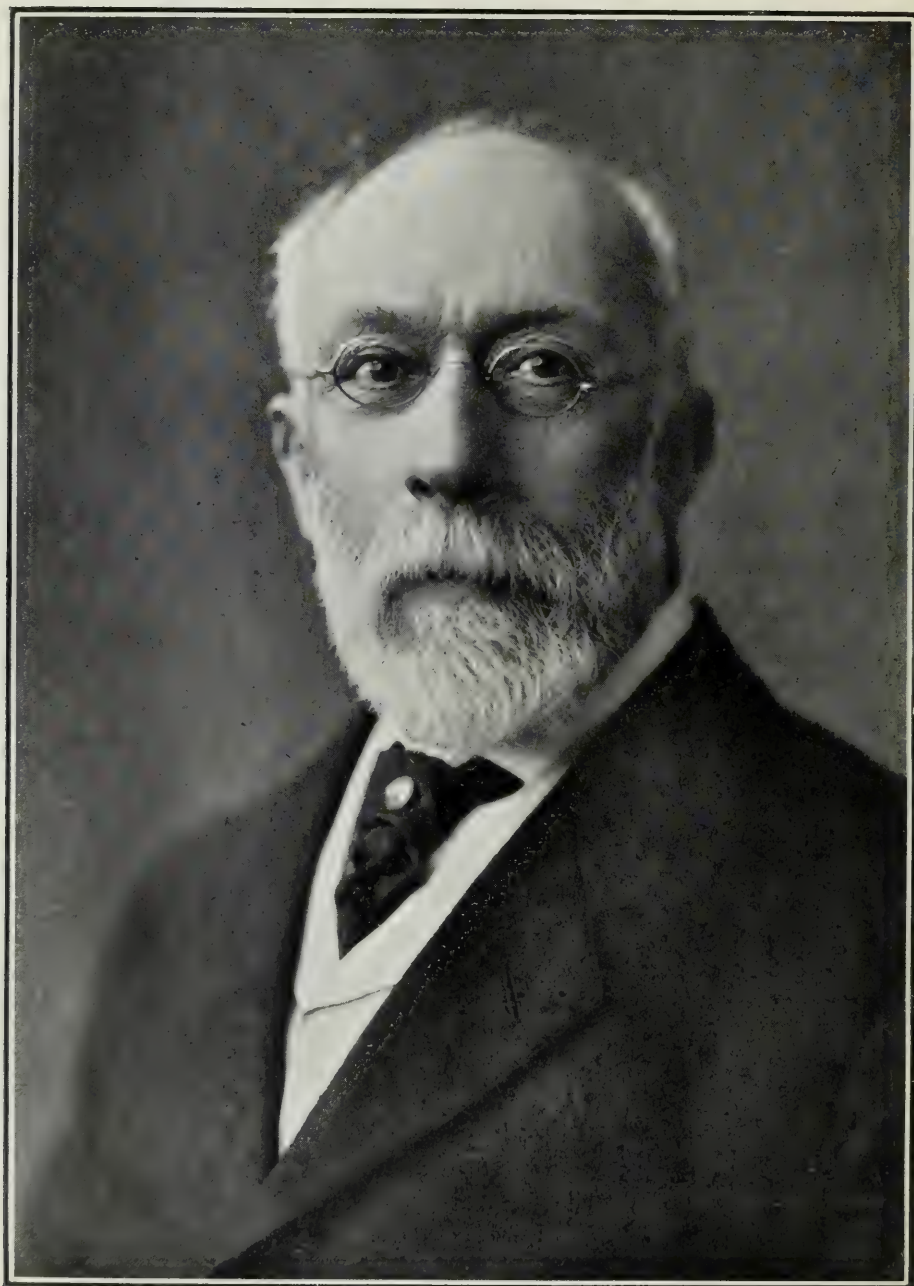
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SIR GEORGE HENRY SAVAGE, M.D., F.R.C.P.

Born 1842.

Died July 5th, 1921.

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SIR GEORGE HENRY SAVAGE, M.D., F.R.C.P.

BORN 1842 : DIED 1921.

By the death of George Henry Savage on July 5th, 1921, at the ripe age of 78, English psychiatry has lost one of its most widely known representatives, the Medico-Psychological Association a former President and one of its most prominent members, English medicine one of its most remarkable personalities, and large numbers of the profession and the public a most trusted friend and counsellor.

The writer has been privileged to have access to records left by Savage himself of his parentage and early life, which cannot fail to be of interest as showing the factors forming the mental "make-up" in such a distinguished man.

He was born in 1842.

Savage's father was a Yorkshireman, and is described as having been "a good horseman, a lover of sports, a good shot and skater." He entered into business as a druggist first at Balham and afterwards at Brighton, where he was the first to give anæsthetics for the Brighton surgeons about 1856, was chairman of the local Athenæum, became an alderman of the Borough and later a Justice of the Peace. He had a keen appreciation of science and for fifty years was a regular attendant at the meetings of the British Association. Savage described him as having an encyclopædic knowledge, as not profound in any science but interested in all, and as having made many interesting experiments.

Savage's mother was of Scottish birth, her maiden name being Wallace. In addition to being a deeply religious woman she was also a great reader. She recognised the value of cultivating observation and took up the study of English botany for the sake of her two boys. The summer holidays were often spent with them on the Sussex downs "hunting out the names of the plants on the Linnean system" with the aid of botanical text-books. Savage's well-known love of botany was thus founded at a very early age.

His regard for her may be summarised in his own words : "She

seemed to me to be the most self-sacrificing and best woman I ever met. Her whole life was founded on the Christian faith." Savage learned to ride, skate and swim at an early age and this love of exercise and sport never deserted him. His experiences at various private schools at Brighton were not very happy. He described his last head master as having "no classical knowledge and no true scientific training," so that at the age of fifteen he had only read "the simplest Latin authors and no Greek beyond the *Delectus*." Nature study was, however, cultivated, and having already some knowledge of botany he soon took the lead. He and others ranged hills and dales within eight miles of Brighton and found birds' nests, flowers and forms of animal life; they yearly sent collections of wild flowers to a flower-show and generally obtained the prize. An assistant master, by name David Lyall, took a personal interest in him, which continued after he left the school and had a great part in shaping his future career.

At first Savage was destined to follow his father's business but this was not congenial to him. However, during that time he did a great deal of practical chemistry, made the various gases, crystallised out most of the salts, and attended classes in chemistry at Brighton College, the teacher being Prof. Bernays, subsequently Lecturer on Chemistry at St. Thomas's Hospital. Lyall, who was a frequent visitor at his father's house, stimulated him to work to become a medical man.

He then became apprenticed to a firm of doctors in Brighton, did dispensing and visited the Infirmary.

Lyall urged him to work for the matriculation of the University of London. This implied much very hard work at Latin, Greek, mathematics, etc., in which he was coached by Lyall and passed with honours in Botany.

He then entered as a pupil at the Sussex County Hospital, the House-Surgeon at the time being Mr. A. Willett, afterwards Surgeon to St. Bartholomew's Hospital. During the two years he spent there he still took a great interest in field botany and also used to go out at night for moths. "I think of some lovely nights spent in woods where the night side of nature was made plain to me." Nature in all its forms appealed to him, and he always regretted that fortune or chance never opened the path for original work to him in this direction.

In October, 1861, he entered as a student at Guy's Hospital, living in modest rooms in Great Ormond Street because "it was nearer the College of Surgeons and other museums than Guy's," working very hard—never less than twelve and often sixteen hours a day.

At that time Moxon and Hilton Fagge were demonstrators in the dissecting room, and among those on the staff were Hilton, Bryant, Habershon, Braxton-Hicks, Gull, Wilks, Bader, Cooper-Foster and Davies-Colley. Among fellow-students were Frederick Taylor, Howse

and Mickley (afterwards Medical Superintendent of St. Luke's Hospital).

Savage was a terrific reader, and has recorded that "Moxon rightly gauged my mental type when he said that probably I read the biggest books on any subject and forgot most but retained the essentials."

In due course he won the Treasurer's Gold Medal, qualified as M.R.C.S. in 1864 and L.R.C.P. in 1865. In the same year he graduated as M.B.Lond. and became House-Surgeon at Guy's Hospital. In the *Guy's Hospital Gazette*, January 31st, 1903, Savage recorded many interesting memories of the past, such as the introduction of the thermometer and the ophthalmoscope and his association with Gull, Wilks, Hughlings Jackson and Sutton, and recalled a forecast by Gull that it was possible there would be a time "when we should not only be able to see the back of the eye but 'right through people.'"

He was an active member of the Boating Club and a frequent swimmer at the Lambeth Baths.

His first association with Bethlem Hospital was in 1866 when for six months he held the post of what was then termed "resident student," being one of the second pair of qualified men thus appointed. Of this six months he wrote: "I believe that I alone saw the possibility which might open as a life's work." However, it was necessary that he should seek for remunerative work, and having been offered the post of medical officer to a lead-mining company at Nenthead, Cumberland, at a fixed salary, with horses and house provided and liberty to do general practice as well, he went there. The practice was of the most strenuous kind. He attended 500 confinements in four years; there were many cases of goitre and of miner's phthisis, an outbreak of smallpox to cope with and occasional accidents. On one occasion he had to amputate a leg unaided and to stop in the middle to do artificial respiration, the anæsthetic being given by the unskilled brother of the patient. He constantly had to ride over the fells on winter nights but his vigorous constitution and athletic nature made light of this, and he revelled in climbing crags, sport on the moors, the botany of the district, and ski-ing over snow and icy roads, on one occasion sliding down a frozen road into the village at the tail of a cow which was rushing away in terror. The village "never forgot the doctor and the cow." On one occasion his bridle was seized at a turnpike as "the last time you leaped the gate; it must have been you as there is nobody else in the county who could do it." During this time he was reading hard for the London M.D., which he took in 1867.

He became engaged to Miss Margaret Walton, of Alston, and was married on September 9th, 1868. A daughter was born in the following year, but in a few days after her birth his short first married life was terminated by the death of his wife from pulmonary embolism. This

tragedy entirely changed the current of his life. For a time he went to Germany with a friend "to look for mosses," botany as usual having an absorbing interest for him. He was in practice at Nenthead for four years. Then a vacancy occurred at Bethlem Hospital, Dr. Henry Rayner, at that time Assistant Medical Officer, having been appointed as Superintendent to Hanwell Asylum. Savage applied for the vacant appointment, and was unanimously selected by the governors from over 100 candidates.

In 1872 he went into residence at Bethlem Hospital and thus began the career in which he became famous.

At that time Dr. Rhys Williams was the Resident Physician and Superintendent, and Mr. G. H. Haydon, who had formed a personal friendship with Savage in 1866, was the Steward. A few words about Haydon are not out of place in this connection. He had been in Australia in youth where he bought land on which part of the City of Melbourne was afterwards built, and had formerly been Steward at the Devon County Asylum under Dr. (afterwards Sir J. C.) Bucknill. He had great talent in drawing and was keen on art and literature, Phelps the actor and Birkett Foster the artist being among his friends. He was a great lover of the country and a fine fly-fisherman, and had a cottage at Hurstbourne where he fished the rivers Test and Bourne. Savage recorded—"He gave me my first rod and first lesson in fishing." Haydon was also an enthusiastic Mason, and under his auspices Savage joined the Old Union Lodge and eventually passed through the chair, but gave up Masonry when he married a second time.

Haydon was a man of striking personality, and not only a great friend to Savage but to all who worked at Bethlem, and only retired a few years after the writer succeeded Savage as Resident Physician.

On his appointment to Bethlem Hospital Savage threw himself with characteristic energy into the work, read up all the literature of the subject, including most of the French and German journals, kept personal notes of all cases in addition to the statutory case-books, and inspired all who worked there to do the same. He also joined Klein's classes in physiology, working hard at preparing specimens and cutting sections, and made the most of the limited pathological opportunities at Bethlem Hospital by making microscopical preparations of morbid material. He was elected a member of the Medico-Psychological Association in 1873, and his name first appears in the *Journal of Mental Science* as attending a meeting in December, 1873, under the Presidency of Dr. Harrington Tuke, among those present being Maudsley, Wood, Blandford, Langdon Down, Paul, Mickle, Rayner, Sutherland, Stocker and Rhys Williams. Savage showed sections of spinal cord, of disseminated sclerosis and general paralysis.

Soon after his appointment Dr. Thompson Dickson, Lecturer on

Insanity at Guy's Hospital, died, and Savage was made his successor, and continued to act thus for thirty years, one of the joys of his life being his Guy's class.

He also attended regularly the meetings of most of the medical societies in London, and joined the British Medical Association, and later the Neurological Society of London as an original member.

Almost immediately after his appointment to the post of Assistant Medical Officer he began to write. To the *Lancet* in 1872 he contributed a paper "On Goitre," the result of his experiences in Cumberland, to the *Guy's Hospital Reports* in 1875 and 1877 papers on "Insanity of Childbirth" and "Heredity in Mental Disease," and to the *Lancet* in 1875 on "Overwork as related to Insanity."

At the meeting of the British Medical Association held in Manchester in 1877 he read a paper on "Hysteria and Insanity," a digest of which appeared in the *Journal of Mental Science* for October, 1877 (vol. xxiii).

In 1878 he took the Membership of the Royal College of Physicians. At the Annual Meeting of the Medico-Psychological Association in the same year (Dr. J. Crichton Browne, President) Savage was acting as Secretary *vice* Rhys Williams, who had been appointed a Commissioner in Lunacy, and was elected Co-editor of the *Journal of Mental Science* in collaboration with Drs. Clouston and Hack Tuke on the retirement of Dr. Maudsley. He continued to act as one of the Editors until 1894, a period of sixteen years.

The year 1878 also marks his appointment as Resident Physician and Superintendent to Bethlem Hospital in succession to Rhys Williams.

From this time onwards for many years the *Journal of Mental Science* and other journals teem with records of his activities not only in connection with our Association, but at the International Medical Congress, London, 1881 (at which he was Secretary of the special section), at the annual meetings of the British Medical Association, Liverpool 1883, Belfast 1884 (at which he was President of the Section of Psychology), Brighton 1886, Leeds 1889, Bournemouth 1891, London 1895 and 1910, the International Medical Congress, Washington, 1887, and the Royal Society of Medicine, Section of Psychiatry, 1912.

It would take too much space to enumerate all his papers in our Journal. He never hesitated to record individual cases which might interest others as well as himself—the effects of treatment and the pathological findings in fatal cases. He was specially interested in the question of marriage of neurotic subjects or those who had been insane.

In this connection may be mentioned his papers on "Marriage in Neurotic Subjects" (*Journ. Ment. Sci.*, vol. xxix, p. 49), "Mental Disorders Associated with Marriage Engagements" (*Journ. Ment. Sci.*, vol. xxxiv, pp. 394 and 467), and "On Insanity and Marriage" (vol. lvii,

1911). The "Alternation of Neuroses," on which he read a paper at the British Medical Association in 1886, also greatly interested him, and he pointed out the frequency with which such conditions as migraine, asthma, hysteria, epilepsy or even diabetes alternated with insanity.

The question of criminal responsibility of the insane concerned him much, and he soon became known as an expert witness where insanity was pleaded as a defence in criminal cases. On the kindred question of "Drunkenness in Relation to Criminal Responsibility" he read a paper in 1886 (*Journ. Ment. Sci.*, vol. xxxii), pointing out the inconsistencies in medical opinion, as to responsibility for acts committed during drunkenness. His paper on "The Plea of Insanity" (*Journ. Ment. Sci.*, vol. xxxvii), read before our Association, is an excellent summary of the then position with regard to criminal responsibility, and it and the subsequent debate in which Dr. Orange of Broadmoor took part are well worth study. Among communications on the pathology of insanity may be mentioned "Cases of General Paralysis with Pachymeningitis" (*Journ. Ment. Sci.*, vols. xxix and xxx), "Cases of General Paralysis with Lateral Sclerosis of the Spinal Cord" (*Journ. Ment. Sci.*, vol. xxx), "Hæmorrhages in General Paralysis" (*Journ. Ment. Sci.*, vol. xxxi), "Hæmaturia, Maniacal Excitement and Hæmorrhagic Pachymeningitis" (*ibid.*), "Morbid Appearances from Hardening Nervous Tissue," communicated to the International Medical Congress, London, 1881 (*Journ. Ment. Sci.*, vol. xxvii), and "Punctiform Cerebral Hæmorrhage" (*ibid.*).

The individual care of the insane and his attempts to get at the seat of delusional states by prolonged personal interviews and endeavours to explain and re-educate into normal paths were notable long before the days of modern psycho-analysis, and he was characteristically untiring in this direction. In 1885 he had been elected a Fellow of the Royal College of Physicians of London and in 1886 he became President of our Association. His Presidential address, delivered at Bethlem Hospital, August 9th, 1886, was "On the Pathology of Insanity" (*Journ. Ment. Sci.*, vol. xxxii). In it he said: "I feel that the great physiological workers, like Ferrier, Horsley and others, are only the engineers who are studying the machinery, while we in asylums have the much more difficult problem of studying the motive power." He discussed diseases of the brain and of the body leading to insanity, the alternation of neuroses and disorders of function, and said—"All bodily disease has its mental aspect." With reference to the treatment of delusions of persecution he said: "In some of these cases there are reasonable methods of treatment, and in several very unpromising cases I have hunted the hallucinations out of house and home." And further—"Each of these convincing proofs has acted as a mental soothing draught, and in the end rest more and more complete has been gained

and the patient has got well." During his Presidency he also read a paper on the practical subject, "When should Homicidal Patients be Sent on Leave or Discharged?" and another, which excited much controversy, on "Whether there is ever Sufficient Reason for the Use of Strong Clothing and Side-arm Dresses." His claim was for freedom to use such restraint as he thought would give patients the best chance of recovery.

In 1887 he attended the International Medical Congress at Washington and opened a discussion on "Syphilis and its Relation to Insanity." An abstract of this is to be found in *Brain*, vol. x, from the *American Journal of Insanity*, October, 1887, and in a paper read by him before our Association in November, 1887 (*Journ. Ment. Sci.*, vol. xxxiii), entitled, "Notes on the International Congress, Washington." The relationship of general paralysis to syphilis had not then been fully established, but he referred to cases of long-standing syphilis followed by general paralysis, ordinary cases of general paralysis with a definite history of syphilis, cases of local syphilitic nerve lesions, treated and apparently cured and afterwards developing general paralysis, and cases starting in the spinal cord (ataxic type). In the discussion he said—"The consensus of opinion seems to be that I was right in saying that some cases of general paralysis undoubtedly come from syphilis." The writer, however, well remembers that Savage was coming to the conclusion at that time that all general paralysis was due to syphilis and not only due to the effects of overstrain as he had formerly taught.

During these years he had been a frequent contributor to the pages of *Brain*. In vol. i of that journal, before it became the organ of the Neurological Society, he had published papers on "Acute Mania associated with Abscess of the Brain," and on "Uterine Displacement Corrected and Insanity Cured." In vol. ix is a paper read by him before the Neurological Society on "Some of the Relationships between Epilepsy and Insanity," and in vol. xi he published "Two Cases of Insanity Depending upon Syphilitic Disease of the Arteries," and "Case of Epilepsy in which there are Periods of Automatism of a very Well-marked Nature." During this period he was in constant touch with Hughlings Jackson, Ferrier, Bristowe, Horsley and other neurologists.

While at Bethlem Hospital he had become much sought for as a consultant in mental cases, and in 1888 decided to retire from the post of Resident Physician and enter into consulting practice, which he did, residing at first at 3, Henrietta Street, W.

An important event during his life at Bethlem Hospital was his second marriage in 1882 to a daughter of Dr. H. Gawn Sutton of the London Hospital. Mrs. Savage was a lady of great personal charm, and her advent was an enormous addition to the social amenities of the Hospital. The dances and other entertainments for the patients became

delightful gatherings and she was much beloved by all with whom she came in contact. A son was born in 1883 who eventually entered the medical profession.

Reference must be made to the "resident students" (now called house-physicians), two of whom were appointed every six months. Many of Savage's happiest memories related to these. He did all he could to make them interested in the work of the Hospital; no less than twenty of them subsequently became assistant medical officers or superintendents of various public and private asylums. L. E. Shaw subsequently became Physician to Guy's, F. C. Turner to the London Hospital, and B. Pitts, G. H. Makins, W. Tyrrell and J. B. Lawford joined the staff of St. Thomas's Hospital, and many were life-long friends. On Saturday afternoons the racket-court in winter and the tennis-courts in summer afforded opportunities for vigorous exercise, in which Savage himself always took part. Visits to the Convalescent Home at Witley enabled him to follow his old hobby of botany and he always encouraged others to take an interest in it. On his retirement from Bethlem Hospital his colleagues and former "students" entertained him at dinner and presented him with a silver rose-bowl. In addition to the class from Guy's Hospital he held special clinical classes for men preparing for the M.D. London, and was always ready to demonstrate in his inimitable manner to foreign and other visitors.

A special feature for some years was the Sunday morning round, at which Wilks, Bristowe and others were frequent attendants. He never kept his knowledge, experience and views under a bushel, and his daily morning visits to the wards were always made in company with his assistant medical officer and resident students, who therefore did not suffer from the absence of constant touch with their chief which is the misfortune in many large asylums.

In 1884 the first edition of his text-book, *Insanity and Allied Neuroses*, was published. This was reprinted in 1886, revised in 1890, was subsequently reprinted several times, and in 1907 a new and enlarged edition was published in association with Dr. E. Goodall, who was responsible for bringing the pathological section up-to-date. The book was essentially practical and clinical, was widely read, and for long was a standard text-book for students in the London School of Medicine.

On leaving Bethlem Hospital in 1888 he was made a member of the Governing Body, and to the end of his life took an active part in its deliberations and in all measures for the improvement of the Hospital and its opportunities for clinical instruction, such as the formation of an out-patient department and the arrangements for courses of lectures in connection with diplomas in psychological medicine. He had for long taken an active part in the management of the After-Care Association and continued to act as its Treasurer to the year of his death.

He had formed a considerable nucleus of consulting practice while at Bethlem Hospital, and after leaving this largely increased. There was, however, no diminution of his activities from the literary point of view. At the British Medical Association meeting at Leeds, 1889, he read a paper on "Massage Treatment in Insanity," at Bournemouth in 1891 on "The Influence of Surroundings on the Production of Insanity," and before our Association in 1892 on "Influenza and Neurosis" (*Journ. Ment. Sci.*, vol. xxxviii). There were also papers (British Medical Association, London, 1895) on "Insanity of Conduct," and in 1901 on "The Use and Abuse of Travel in the Treatment of Mental Disorders" (*Journ. Ment. Sci.*, vol. xlvii). To *Brain* he contributed articles on "Imperative Ideas" (vol. xviii, 1894) and on "Heredity and Neurosis" (vol. xx, 1897). The latter was his address as President of the Neurological Society. In the *Transactions of the Medical Society of London* (vol. xvii) is a paper on "Some Neuroses of the Climacteric," with a summary of cases at Bethlem Hospital 1888-1903.

In 1907 he delivered the Bolingbroke Lecture on "The Factors of Insanity" before the South-West London Medical Society, and in the same year the Lumleian Lectures at the College of Physicians on "The Increase of Insanity." His conclusions were: "I do not find there is any real ground for alarm in the increased number among the insane; there are many reasons for the apparent increase." "It is noteworthy, too, that there is no increase in persons of the young and of the middle ages, the increase being greater after the age of sixty."

In 1909 he was Harveian Orator before the College of Physicians. He reviewed the treatment of the insane in Harvey's day and the progress since, and referred to experimental psychology and hypnotism. As regards the latter he said—"Those mental disorders that are purely functional and such as do not cross the insane border-line may be benefited." In 1912 he received the honour of Knighthood as a rather belated recognition of his remarkable career. Unfortunately he had had some years before this again to suffer a severe bereavement by the death of Mrs. Savage, who was thus unable to share in the honour conferred on him.

In 1912 also he was made the first President of the new Section of Psychiatry of the Royal Society of Medicine. In his address he gave a general review of the past, referring to the work of Crichton Browne at Wakefield, of Hack Tuke, Bevan Lewis, Wigglesworth and others. He spoke of Tuke's *Dictionary of Psychological Medicine* as a "mine still worth working," and said that in it would be found "many evidences that what seem to be quite new and original observations or beliefs are neither new nor original." Very characteristic of him are such remarks as the following: "Let us be collectors and recorders, but at the same time let us recognise that what seems to us to be fixed and established

to-day may in the future prove to have been only partially true." "Agnosticism in science is not infidelity, and we must cultivate it." "We are prepared to follow truth where it leads, and a dim light is better than none in such darkness as the realms of life and consciousness." In 1912 he lectured to the Medical Graduates' College and Polyclinic on "Medico-legal Relationships of General Paralysis of the Insane" (*Lancet*, February 3rd, 1912).

During the late war he was one of the consultants attached to Lord Knutsford's group of hospitals for officers, and read a paper before our Association on July 27th, 1916, on "Mental Disabilities for War Service." He also took part in the formation of the Enham Village Centres for Disabled Men. In July, 1917, he wrote for our Journal on "Dr. Hughlings Jackson on Mental Disorders," summarising Jackson's well-known views as to the presence of positive and negative states in nervous and mental disorders. He also referred to his association with Jackson and Sutton in his early days at Guy's Hospital following the teaching of Gull and Wilks.

His last communications to our Journal appear to have been an obituary notice of the late Dr. G. W. Mould (*Journ. Ment. Sci.*, April, 1919), and an appreciatory note appended to the obituary of Dr. David Yellowlees (*ibid.*, April, 1921).*

In addition to the numerous papers to medical journals already referred to, he wrote no less than twenty of the articles in Tuke's *Dictionary* and six in *Allbutt's System of Medicine* in the section of Mental Diseases (vol. viii), perhaps the most important one being that on "General Paralysis of the Insane" in association with Dr. E. Goodall.

Enough has been said to show the comprehensive nature of his energies in connection with medical literature.

A short summary must be given of some other lines in which his vigour and inexhaustible vitality were displayed. In his earlier years at Bethlem Hospital his holidays were usually spent in walking tours with a friend, and in this way he visited Austria, the Tyrol and Norway, but Swiss mountaineering did not at first attract him. But having won the Derby sweepstake at the St. Stephen's Club he went to Zermatt, where he soon became a vigorous climber. He made a record ascent of the Matterhorn, reaching the summit from the Hörnli in four hours. He once ascended the Weisshorn by moonlight, and his ascent of the Gabelhorn from the Trift Glacier is recorded in the *Alpine Journal*. He became a member of the Alpine Club, and was a friend of many well-known Alpine climbers, among whom may be mentioned Frederick Taylor, Howse, Clinton Dent and Makins. Eventually he became Vice-President of the Alpine Club.

For many years he was a member of the "Sunday Tramps," and was

* Also a review of *Morning Knowledge* (*ibid.*, July, 1921).

associated in this way with Leslie Stephen, James Sully and many others well-known in the world of literature.

The Organon Club and the Casual Club also brought him into relation with many who became well known in science, such as Odling, Rolleston, Clifford Allbutt, Ray Lankester, Thistleton Dyer, Sprengel, Donkin, Balfour Browne and others.

He was a keen fencer, and the "Savage Shield," which he presented, is annually competed for at the Epée Club. He was a member of the Athenæum Club and of many dining clubs, such as the Sydenham, the St. Albans, the United Hospitals (Guy's and St. Thomas's), the Fifteen Club, and the College Club. He was a great *raconteur* and was always in request as an after-dinner speaker, his fund of information and humour being apparently inexhaustible. He was a most genial host. At Hurstbourne in Hampshire, where he had a cottage, he spent week-ends in fishing, cycling, golf and botany, enjoying every moment in association with his most intimate friend of many years, Seymour Sharkey.

In view of his botanical knowledge it was appropriate that he should have been for many years the representative of the College of Physicians on the Committee of Management of the Chelsea Physick Garden founded by Sir John Soane.

He was consulting physician to several private asylums, notably to the Priory, Roehampton, and Chiswick House, and also to the Earlswood Asylum, Redhill. He was also an Honorary Fellow of the Royal Academy of Medicine, Ireland.

For many years he was a regular attendant at St. Peter's Church, Vere Street, becoming a close friend of Canon Page-Roberts, afterwards Dean of Salisbury.

His increasing deafness, however, recently rendered it impossible for him to hear a preacher, and made it very difficult for him to follow and take part in debates in medical meetings in which he had formerly been so active. But as recently as February last he was present at the meeting of our Association to listen to Sir Frederick Mott on the pathology of dementia præcox.

For many months increasing ill-health had caused anxiety to his friends, but it was characteristic that he should fight against his disabilities. Gradually he had to abandon his more active pursuits, but still dined out as long as he was able. In May he retired from all official work, and only about three weeks before his death he expressed to the writer his conviction that he should not live beyond August. Shortly after this an attack of hemiplegia from which he did not regain consciousness mercifully relieved his sufferings, and he died on July 5th, 1921. The first part of the funeral service was held at St. Marylebone Parish Church, and the interment of his ashes after cremation took place at Sevenoaks by the side of his second wife.

He is survived by his daughter, Mrs. Droeser, and his son, Dr. Harold Savage, who is in practice in the Malay States.

By those who had been his colleagues he was always looked up to as a great master; he never lost interest in their careers, and many were the kindnesses to which those who worked with him can look back. He was always a ready adviser in troubles or difficulties. Many of his aphorisms remain in the memory, and his example of strenuous work and undying interest in his profession remains as a constant inspiration. Of him it may be truly said—"He being dead yet speaketh."

R. PERCY SMITH.

Part I.—Original Articles.

The Position of Psychological Medicine in Medical and Allied Services. The Presidential Address at the Annual Meeting of the Medico-Psychological Association of Great Britain and Ireland, held in London on July 11th-15th, 1921. By C. HUBERT BOND, C.B.E., D.Sc., M.D.Edin., F.R.C.P.Lond., Commissioner of the Board of Control, and Emeritus Lecturer in Psychiatry at Middlesex Hospital Medical School.

PERMIT me at once to express my deep appreciation of the honour you have done me in electing me your President, and my particular satisfaction in finding myself inducted into this chair by a friend of many years' standing.

As to the wisdom of your choice I am still very doubtful, but the encouragement received from members of the Association, to whom those doubts have been fully communicated, and from my colleagues on the Board of Control, whose goodwill in the matter was essential, emboldens me to hope that my affection for our Association, now eighty years old, and the friendships gained during a close upon thirty years' membership, will in some measure obliterate deficiencies—be these through lack of time or capacity.

Charged with the preparation and delivery of an address, choice of subject must always be a matter of moment to the President-Elect, and, as the years roll on and the volume of addresses swells, the task of making a suitable selection becomes more formidable. Be their subject what it may—historical, analytical or synthetical—many of them have been scholarly and erudite, some of them landmarks, and all have been the fruit of expenditure of much time, and not infrequently of original observation and research. Nor is the task lightened when we yet have ringing in our ears the Maudsley Lecture—worthy of its orator—and when the address of the immediate Past-President was of the masterly

and comprehensive character as that to which we listened from Dr. Menzies.

Though inclination led me to seek a clinical subject, there are valid reasons for offering you on this occasion an administrative topic, namely, "The Position of Psychological Medicine in Medical and Allied Services." The Great War, more than any other event since the birth of Christ, has fired men's imagination—the mightiest of levers. "Never again" was the vow constantly taken during the conflict's progress, coupled with an ardent belief in better times to come. In no department of science more than in medicine, especially in its preventive aspects, have these aspirations been higher, and in no branch of medicine has this revivifying influence and stimulant to interest—from within and on the part of the general public—been more potent than in our specialty, which in virtue of its inseparable medico-legal relationships must always demand administrative as well as medical consideration. But a sufficient stride forward was necessary to enable us to take stock of its lessons, to appraise the permanency of any change in incidence of mental maladies,¹ and to revise our demands—shaped in the first instance, and rightly so, on idealistic lines—in conformity with available resources.

PUBLIC INTEREST IN MENTAL DISORDERS.

It would, indeed, be difficult to find anyone to-day who would assert that the mental health of the nation is of less moment to it than its physique: *orandum est, ut sit mens sana in corpore sano*, is as true to-day as when written eighteen hundred years ago, though by curtailment in quotation the words are apt to lose their real significance. Official recognition was given to this truism and to the kinship between mental and bodily disorders and their treatment, when by an Order in Council made on May 17th, 1920, the Board of Control became affiliated to the Ministry of Health, and most of the powers of the Secretary of State under the Lunacy and Deficiency Acts were transferred to the Minister of Health; and from this significant affiliation, which leaves the Lord

¹ For example, while during the quinquennium 1910-14 the average number of female direct admissions into institutions for the insane and into single-care (in England and Wales) was 11,668, or a ratio of 6·21 per 10,000 population, the average number during the three war years, 1915-17, was 10,894, i.e., a ratio of 5·59 per 10,000; but the admissions during the years 1918-20 were 11,687, 12,060 and 12,003 respectively, with corresponding ratios of 5·93, 6·15 and 6·07; and it may be of some significance that, while in pre-war years there was no marked seasonal or monthly variation in the number of admissions, and such as obtained was never high in November, yet in 1918, while the number of female admissions in September and October were respectively 7·2 and 7·8 per cent. of the total female admissions during that year, the percentage during November was no less than 10·1, and the maximum number of reception orders made on any given day occurred on the day following the armistice. These figures, for what they are worth, have been restricted to females, because those relating to males would be vitiated by the large number of the male population serving with the Forces.

Chancellor as the judicial head of lunacy administration in respect of matters of detention and property, it is legitimate to expect that, finding itself in the main stream of medical thought, psychological medicine will progress at least as rapidly as other branches of medicine. Last year also witnessed the appointment by the War Office—in accordance with a promise made to Parliament and as the outcome of the great public interest in the matter—of a departmental committee (presided over by Lord Southborough) to consider the different types of so-called “shell-shock,” to collate and record for future use facts as to its nature, origin and treatment, and to advise whether some scientific method of guarding against its occurrence cannot be devised. In this connection we are looking forward to hearing a paper¹ by Dr. Bernard Hart. Moreover, of the numerous questions asked in both Houses of Parliament concerning persons under institutional treatment—whether general or in relation to specific cases—probably the majority relate to cases of mental or allied disorder. Owing to the implication of detention with treatment, these questions may quite possibly reflect not so much interest in therapy as suspicion or distrust of the *régime*, which it behoves us all to do our utmost to dispel; and for that purpose there are no better weapons than candour and the inducement of members of the public to come and see for themselves—in other words, minimise isolation. Nor, as a recent mark of the wide-spread interest in mental disorders, especially in the so-called borderland cases, should mention be omitted of the munificent foundation and endowment by Sir Ernest Cassel of a hospital with sixty beds for the treatment of functional nervous disorders of the type popularly designated as “nervous breakdown.” For the objects of the institution, now known as the Cassel Hospital (Swaylands, Penshurst, Kent), the founder has devoted no less than £225,000.² Great good as well as further enlightenment as to the prevention and treatment of these illnesses may be safely anticipated from its operations, though probably they could be extended and carried out with less anxiety on to the selection of cases if legislation, on lines advocated by our Association and the Board of Control, could be secured. It is much to be hoped that this example of generosity will be followed by others, for while in former years donations and legacies to mental hospitals supported by voluntary contributions were frequent, during the last ten years or more they have been very rare; and it is lamentably notorious that there are now many persons of good education and social standing being treated in public mental hospitals at the cost of the ratepayers, because the institutions (thirteen in England), which were founded specially for such cases, but which were either not endowed at all, or (with perhaps one exception) only very

¹ “*The Problem of Prevention in the War Psychoneuroses.*”

² See *British Medical Journal*, May 7th, 1921, p. 680.

slenderly so, are not able to do anything like the charitable work they once did, and also for lack of funds most of them are unable to add the structural arrangements demanded for modern methods of treatment. This want should be made widely known, for these excellent hospitals have a fine record and are worthy of generous support.

To return, however, to the provision which should be made for psychological medicine within the scope of a general scheme such as that propounded by the Consultative Council of the Ministry of Health, valuable and well-considered suggestions to this end were made by Dr. Goodall in an article to which further reference will be made later.¹ They were reinforced by notes of cases illustrating the different arrangements for treatment which he set out, and, consistent with the terseness he used, it would be idle for me to attempt to deal with the matter afresh but for the fact that on these annual occasions brevity is not so rigidly enjoined; and if, in enlarging upon some of the points he made, some of his suggestions are repeated, he will acquit me, I hope, of plagiarism.

EXISTING LEGAL RESTRICTIONS ON THE TREATMENT OF MENTAL DISORDERS.

There is still apparently so much misconception, not only in lay but even in professional circles, concerning the administrative problem involved when dealing with mental disorders, that, at the risk of being tedious, it seems advisable once again to set out the present legal position in sufficient detail to be clear, before endeavouring to show where are the deficiencies and what are the obstacles to progress.

Speaking generally, mental disorders and mental deficiency form the only department of medicine concerning which the English law lays down formalities of one kind or another which have to be complied with before the patient, except he continues to reside at home, can obtain treatment; and home—however good a one it may be—for many patients mentally ill is the worst possible place for their treatment.

(1) *Restrictions as to in-patient treatment.*—That is to say, a person who is sufficiently ill to enable him to be certified as of unsound mind within the meaning of the Lunacy Acts (England and Wales), but who is also sufficiently self-controlled and cognisant of his mental illness to enable him to seek treatment and to desire to be received for payment into a county or borough mental hospital, a general hospital, a nursing home, or into a private house—such a person cannot, without infringement of the law, be received until he has been duly certified as of unsound mind, and, with the exception of the brief (seven days) operation of urgency orders, until a justice's order has been obtained for not only his reception and retention, but for his detention too.

¹ *Lancet*, September 11th, 1920, p. 541.

(2) *Meagre extent to which voluntary treatment is permitted.*—As you well know, in the case of institutions for mental disorders other than the ninety-seven county or borough ones—namely, the thirteen registered hospitals and the fifty-eight licensed houses—such a person (as also a person who is fully *compos mentis* or else so slightly ill as to be not certifiable as of unsound mind) can be received and retained as a “voluntary boarder” on his personal application, and may leave upon giving twenty-four hours’ notice in writing; that is to say, he may be detained against his will for twenty-four hours, but not longer, except in the meantime he is certified¹ and an order for detention is obtained. Notice of admission has in all cases to be sent to the Board of Control. In the case of the licensed houses, his application for reception (which requires to be in writing) has to be made—according to jurisdiction—either to the Commissioners or Justices, and the consent of a Commissioner or two Justices is necessary; but with respect to the registered hospitals, no consent or formalities of any kind are enjoined other than notice of his admission by the hospital to the Commissioners, who are thus able to institute such inquiry and exercise such supervision as may seem called for.

(3) *System of voluntary admission should be extended, especially to county and borough mental hospitals.*—The system of voluntary boarders in registered hospitals has worked well; and, judging by the remarkable and probably exceptional circumstance that, at the moment, of the number of cases admitted into the oldest of these hospitals, those received as voluntary boarders are as many as those admitted under certificates, the system finds favour. The explanation as to the difference between registered hospitals and licensed houses as respects stringency of requirements for voluntary admission is historical and accidental, and is not based on the respective merits of the two forms of institution: it would, indeed, be hard to find valid reason why the same simple and formless procedure should not be available for voluntary admission to licensed houses, and equally hard—except as to chargeability questions—with respect to county and borough mental hospitals, to which, as already stated, no voluntary admission is permitted.² As to this denial to public mental hospitals of what would

¹ The Board of Control early in February, 1921, issued an important circular to medical superintendents of registered hospitals and licensed houses upon the admission of “voluntary boarders” to those institutions, and upon the question of the right course to adopt should such a patient develop symptoms rendering retention on a voluntary footing improper.

² The Maudsley Hospital, which is one of the County of London Mental Hospitals, is an exception to this statement; for in 1914-15 under Section 23 of the London County Council General Powers Act (5 and 6 George V), power was given for the reception and treatment of boarders and for the payment of their maintenance. The section is as follows: 23 (1) *The Visiting Committee may, if they think fit, receive and lodge as a boarder and maintain and treat at the asylum known as the Maudsley Hospital on such terms and conditions as to payment and*

be an unquestionable boon to poorer persons who are mentally ill and desire treatment, it is useful to remember that in Scotland voluntary boarders are admissible to these institutions. After all, with regard to voluntary admissions, the really important factor from the point of view of the liberty of the subject is not the procedure leading up to admission, which, as the experience of at least thirty years in connection with registered hospitals shows, need only be of the simplest, but the subsequent inquiry and supervision. As to the authority which should undertake this work, it would not on an occasion such as this be proper to enter into a matter about which there has been controversy, even though it was based, as I believe, upon misunderstanding; but, in sometime re-considering the matter, the unchallenged and often repeated dictum of the Consultative Council—"that preventive and curative medicine cannot be separated on any sound principle, and must be brought together in close co-operation"—should be borne in mind.

It is therefore manifest that a person suffering from mental illness in degree sufficient for him to be certified as of unsound mind—no matter how speedily curable his illness is and no matter how desirous he is to be treated—cannot obtain treatment at all, as an in-patient for payment, in a public mental hospital, in a general hospital, nursing home or private house except fully certified and under an order for detention; that under considerable formalities he can secure it as a voluntary boarder in a licensed house; and that the least irksome restrictions under which he can get it are by his reception as a voluntary boarder into a registered hospital, for which all that is necessary is his bare application, which need not be in writing, though it practically always is so.

It is extraordinary how imperfectly these facts are grasped by medical practitioners, except those practising in the specialty; and it is therefore less surprising how almost totally ignorant of the scope of these legal restrictions are members of the general public. But, if we are ever to procure acceptable facilities for the prompt treatment of curable mental disorder in its incipient and early stages, it is of the utmost importance that at least the general effect of these provisions of the law should be understood.

(4) *No legal restrictions upon out-patient treatment.*—It is to be observed that these various restrictions apply solely to receiving, boarding, lodging or detaining, for payment, a person certifiable as of unsound mind—in short, and using a term more appropriate to a scheme

otherwise as they may determine any person suffering from incipient insanity or mental infirmity who is desirous of voluntarily submitting himself to treatment therefor. (2) The Council or any Board of Guardians in the County may, if they think fit, defray the whole or any part of the expenses of the maintenance and treatment in the said asylum of any such person as a voluntary boarder.

of medical services—solely to in-patients. There are no legal restrictions upon the treatment as an out-patient, either in the out-patient department of a general hospital or elsewhere, of such a person, however severe the symptoms may be. Elementary as this fact is, neither it, nor the great advantage to which it may be turned, seems to be at all adequately realised.

(5) *Dependence of legal restrictions upon "certifiability" and the difficulty of its definition.*—Similarly there are, of course, no lunacy law restrictions in relation to the treatment of a person nervously or mentally ill but who is not certifiable as of unsound mind. Doubtless that statement is open to the forsenic argument whether a person can be mentally ill and yet not be of "unsound mind," but to pursue it would carry us into difficult and deep waters, from which, even if we gave the time to navigate them, we should probably be stranded on a barren shore. The point to remember is that "certifiability," despite its intimate association with our profession, is a sociological rather than a medical term, which is elastic, and—as our revered Past-President, the late Dr. Mercier, never tired of telling us—is mainly dependent on conduct, the appraisal of which is made by medical practitioners largely in conformity with the community's feelings as to what manifestations of conduct justify deprivation of liberty; and those feelings in course of time are liable to change. In the early history of institutions for the insane, as their name connoted, their main function seems to have been as a refuge for those unable to fend for themselves, or whose conduct could not be tolerated by their families or the community; and, though the notion of recovery and treatment was never absent, safe custody was the key-note to much of the management. It is remarkable what little reference to "treatment" is to be found in the Lunacy Acts other than the use of the word in the form of documents for reception; but, with the advance of medical knowledge, treatment of the mental condition came more and more to the front, and still more recently the notion of prevention. With this advance in knowledge, therapeutic facilities in mental institutions have been greatly augmented, though many needs still await supply; and there are now numerous persons by whom or for whom treatment is sought, whose mental symptoms arouse at home nothing but an affectionate anxiety to have them effectively treated, and are either unknown to or do not trouble their neighbours. But if removal from home is advisable, at once arises the question, Is the patient certifiable? If clearly so, only under the provisions of the Lunacy Acts can he, as already explained, obtain treatment away from home as an in-patient. If apparently not so, those Acts purport complete freedom of choice as to where he is treated and an entire absence of any obstacles to treatment: such a description is, however, considerably wide of the truth.

(6) *Alleged "uncertifiability" too vague as a guide to arrangements.*—In the first place, we are confronted again with the impossibility of defining what degree of unsoundness of mind is certifiable, the influence of the personal equation, and the difficult position in which the family doctor finds himself in recommending certification against the wishes of the patient or relatives; and secondly, though the patient may be indubitably not certifiable, change of phase in mental affections—concerning which we are promised a paper¹ to-morrow by Dr. Beaton—is notoriously frequent, is apt to be startlingly sudden, and perhaps first manifested by suicidal impulse, but on the other hand may be insidious, and so be overlooked. These are some, though not all, of the pitfalls into which, until legislation gives some relief to the situation, a person, who "for payment takes charge of, receives to board or lodge"² one of these nervously or mentally ill or so-called borderland cases, may be led; and, as the fall is a misdemeanour—and one in which absence of guilty knowledge cannot be pleaded as a defence—carrying with it a penalty not exceeding £50, there is naturally no small apprehension and reluctance in undertaking to provide accommodation for such cases, either in private houses or in general or special nursing homes.

If a brief digression may be permitted, it is my desire to take this opportunity to interpolate two remarks: one of regret at the imperfect appreciation of these facts by so many members of our profession, and their habit, when asked for a report on a person alleged to be certifiably of unsound mind, of replying that they do not consider certification necessary, which is an evasion, intentional or accidental, of the question, and is not a matter they are entitled to decide; and one by way of protest at the readiness with which some, including members of our own specialty, will profess an opinion of uncertifiability in the face of prominent symptoms of insanity or mental deficiency, and—what is worse—will recommend the case to the charge of someone ignorant of the law, who in good faith accepts the case on the strength of the recommendation but who is not protected thereby. The dilemma of the doctor, who is anxious to secure treatment for the patient, but who is met with positive refusal by the relatives to assent to certification, is patent; but he would render a far greater service to psychological medicine were he less complacent and were he to do more to create a better understanding of the need of legislation upon this matter.

The position as to cases alleged to be uncertifiable can be summed up by saying that, while it is undoubtedly true there are no Lunacy Law restrictions upon the arrangement of whatever medical services may be accepted as desirable for uncertifiable cases; in point of fact, owing to well-grounded apprehension in the matter, there is a lamentable

¹ "*Change of Phase in the Psychoses*," by Thomas Beaton.

² Section 315 of the Lunacy Act.

deficiency of such arrangements, and consequently there are many—we may safely say thousands—for whom no such medical services have hitherto been available; nor will they be fully provided until legislation is secured. It was therefore so far satisfactory to see introduced into the Ministry of Health (Miscellaneous Provisions) Bill, two sections (8 and 9 of the draft of December 9th, 1920), which, had they become law, would have in some measure met these difficulties in respect of mental disorder incipient in character and of recent origin; but they did not purport to provide for voluntary admission into county and borough mental hospitals,¹ and under formalities somewhat stricter than those which now obtain under the Lunacy Acts for voluntary boarders in registered hospitals and licensed houses, they were definitely limited to voluntary admission.

(7) *Certifiable cases, either (a) without volition or (b) hostile to treatment.*—This limitation to voluntary admissions brings us to the remaining two groups in the administrative classification, under which mental cases can be conveniently considered in respect of medical services required for them. All the cases in the two groups now to be considered are indubitably certifiable as of unsound mind. But there is this marked difference between them: in the one group (a), whether the mental illness is recent or of long standing, all are either too severely ill to realise their surroundings and understand what arrangements are made for their treatment—just as not infrequently happens in infectious cases who are removed neither with nor against their consent to an isolation hospital—or are so severely ill or decayed mentally that, though not unconscious of their surroundings, they are nevertheless without volition, and tacitly acquiesce in what steps are taken for their treatment, or at any rate raise no objection thereto; in the other group (b), again whether the mental illness is recent or of long standing, they are fully cognisant, though perhaps deluded, as to their surroundings, but do not believe or will not own that they are mentally ill, and they resent direction or control or any suggestion of in-patient treatment. On behalf of any of the cases in this latter (group the “unwilling” cases, as they may briefly be termed), no one who has seriously thought the matter out suggests any relaxation or change in the law; and there is common consent that, even though the patient is free from propensity dangerous to himself and others, no attempt ought to be made to secure his control for purposes of treatment except under the provisions of the Lunacy Acts. In the former group—namely, where there is absence of volition—are included a large proportion of the long-standing, chronic cases which go to

¹ *Neither did they as respects voluntary admission into registered hospitals and licensed houses; but this was immaterial in view of the fact that both these classes of institution can already receive voluntary boarders.*

make up the accumulated residue of the inmates of institutions for the insane. Here, again, no one suggests that any of them should be dealt with other than under the Lunacy Acts, or that any of the provisions in those Acts should be relaxed in their favour. If on no other grounds—and there are many—questions of authority to deal with such a patient's property would arise.

(8) *Considerations affecting "recent" certifiable cases, without volition.*—Facts worthy of altogether different consideration can, however, be given as to recent cases with impaired volition—the "indifferent" as, in contrast with the "unwilling" cases, they may be termed. In their early stages, they—together with those capable, if permitted, of voluntarily submitting themselves to in-patient treatment (the "willing")—are the source of by far the majority of recoveries from an attack of mental disorder; and for the purposes of our argument, it is of importance to remember that most of these recoveries take place within a comparatively few months of the reputed onset of the mental illness. Thus, of 700 recoveries which were made in patients under the care of colleagues and myself at Long-Grove Mental Hospital (in the years 1907-11), 44 *per cent.*, took place within six months of the commencement of the particular attack of mental disorder, 60 *per cent.* within nine months and 73 *per cent.* within a year, and these percentages would be appreciably higher were they based—as would be quite fair—upon the duration of residence within the hospital. There is also no reason to suppose that they would be less were a corresponding estimate available from totals for the whole country. The extent of the problem, with its hardship so often pointed out, and the degree to which its solution might conceivably affect "the liberty of the subject," can be gauged by remembering that—taking the population of England and Wales at about 35 millions, or, allowing for the rarity of insanity under fifteen years of age and deducting persons below that age, at 24 millions, and relying on pre-war figures—some 22,000 persons are yearly certified and sent to institutions for the insane, *i.e.*, 1 in 1,600, or disregarding childhood, 1 in 1,100 of the general population; and that, of those 22,000, nearly 8,000, or about 35 *per cent.*, recover. Moreover, of those 22,000, 86 *per cent.* are admitted into county and borough mental hospitals, so that, for the "willing," the system of voluntary admission into the registered hospitals and licensed houses is but little available.¹

There are no reliable figures which can be quoted by way of indicating the proportions in which the "willing," the "indifferent" and the "unwilling" are distributed among the 22,000—a deficiency which, had it been possible to find the time, it was my hope to have supplied.

¹ During the year 1920, besides 609 direct admissions under certificates into registered hospitals and 1,037 into licensed houses, there were 325 voluntary boarders received into the former and 308 into the latter.

The point is obviously not without importance, and endeavour shall yet be made to make an estimate based on personal knowledge of a large number of cases; but the value of such an estimate would be enhanced did it convey the views of several of us who possess the data necessary for analysis. May I therefore express the hope that others besides myself will take up the point, so that the Association can, if asked, express a reliable opinion on it.

Assuming—and it is probably safe to do so—that by far the majority of these yearly 22,000 direct admissions would fall into the two categories I have designated as the “willing” and the “indifferent,” where, then, is the good sense or fairness—especially if they themselves or their relatives resent the procedure—in insisting that they shall all go through the formalities of certification, involving the recording of their names and other family information in a name-register of approximately 100,000 cases of insanity, the great majority of which are of the chronic type, and in insisting that a Justice’s order shall be obtained to compel them to do that which they themselves desire or proffer no objection to do? Is it not reasonable to press, on their behalf, for such a relaxation of the law as will enable treatment, without certification, to be carried out for a limited period and under adequate supervision?

So far as known to me, the only opposition to the relief from this situation, suggested in reports of this Association and in those of the Board of Control and of others, comes from persons who regard the Lunacy Act as one of the sacrosanct charters, any amendment of which might expose persons of sound mind to an assault on their liberty. They do not realise that if there is nowadays ground for the slightest such apprehension—and it is worth remembering that, in the days of the Select Committee on Lunacy Law which sat in 1877–8 and is sometimes referred to as the Dillwyn Committee, in not one of the many such allegations investigated was *mala-fides* or other sinister motive proved—the actual procedure of the Lunacy Acts is on the whole a greater source of protection to the authorities of the institution than to the detained person. The latter’s surest safeguards provided by these Acts are his right of correspondence and, as the Committee reported, the frequent and careful visitation of the institutions, and full power¹ placed in the hands of Commissioners to order his discharge.

Candour and full explanation count for much in a matter that is in any way controversial. It is therefore only fair to point out that a case which can clearly be labelled “indifferent” may, during in-patient treatment, emerge and pass into a condition of unwillingness. To any such objection the reply is that the relief which has been proposed does not carry with it any power whatsoever of retention against the

¹ Such power is possessed by the Commissioners now as respects patients of the private class, but not as respects patients paid for out of the rates except by the indirect means mentioned in the foot-note on p. 416.

patient's will; and furthermore, those who are ready to assent to relaxation of the law in favour of voluntary admission (the "willing" cases) but object to extend the concession to the "indifferent," may fairly be reminded of the fact that a "willing" case, quite as readily as one of the "indifferent" ones, may pass into a phase of hostility and unwillingness.

(9) *Extent to which notification, in lieu of certification, might be requisite.*—The truth is that against possible unauthorised detention, whether for personal profit or—as is much more likely—for the sake of carrying on treatment, the real protection, apart from the ordinary common-law remedies, is not in forms and procedure, but in supervision (facility for inquiry and visitation) and power to take such action as seems called for, at the hands of those who have the requisite experience and independence. This raises the question of what is desirable in the way of notification. The recommendations of this Association¹ contemplated that buildings to be used for mental in-patient clinics (the urgent need for which remains unsatisfied), whether as annexes to general hospitals or as special units provided by local authorities, would be subject to some inspection and approval, but made no mention as to whether names of patients should be notified on admission and departure²; presumably such was not considered necessary in view of the absence of power of detention and the public status of these clinics—and this, too, was the opinion of the Board of Control. But, with respect to the advocated further provision for private patients and residential treatment for profit, the Association recommended that the fact of the patient's reception and of his cessation of residence should be intimated (presumably *nominatim*) to the Board of Control. The latter were prepared to dispense with knowledge of the patient's name, relying on the power which they assumed would be given them to make inquiry and to visit when the circumstances of the case called for such action, and believing that the satisfaction of patients and their relatives and the general success of the proposals would be promoted in proportion to the minimum of notification, publicity and procedure, compatible with safety. It is a point of principle which may need further consideration whenever—or preferably before—fresh legislation upon the matter is introduced.

NEED OF FURTHER PROPAGANDA.

So many of you are fully conversant with these medico-legal matters, and have been stout advocates of the measures of relief indicated, that some apology should be made for dealing with them at a length that

Passed at the Quarterly Meeting, November 26th, 1918; see pp. 36-44, Journal of Mental Science, January, 1919.

² *Ibid.*, Recommendations 2 to 8 and 12.

may seem out of place and to savour of the conversion of the converted ; especially some is perhaps due to those of my Scottish *confrères*, who believe that their lunacy enactments have been freed from these impediments to early treatment. If excuse is needed, it is my belief that the reason the sections in the Bill, to which allusion has been made, were limited to cases capable of exercising full volition, was not on account of any disbelief in the rectitude of a wider measure of relief, but because those in the best position to know had strong grounds for doubting whether anything going beyond that tabled could be passed into law. If that view is correct it surely behoves members of the Association individually to use the pause imposed by the public's financial restrictions, before re-opening this subject, in converting that opposed body of opinion to our way of thinking—not forgetting that we are regarded as biased, and rightly so ; for we *are* biased, but only in the interests of the patients we are called upon to treat and the many others that are left without treatment. To this end, are you satisfied that individual members of your Visiting Committees are sufficiently seised of the details of our proposals and of their reasons to enable them, in conjunction with yourselves, to take occasion to discuss and urge them upon their respective members of Parliament ? Have you examples ready with which to illustrate your points ? Two come at once to mind, and they have been cited before : first, the position of sailors and soldiers, to whom, because they are service men, the restrictions of the Lunacy Acts are regarded as not necessarily applicable, thus enabling them, if mentally ill, to be treated without the intervention of a justice—yet it would be less difficult than under our proposals, in which detention is ruled out, to conjure up conceivable abuses which have neither occurred nor been alleged ; and second, the position of a woman who soon after childbirth develops mental illness, which our experience teaches us—at any rate as regards the particular attack, stormy, delirious and life-endangering though it may be—is usually eminently curable. Treatment at home, save under the most favourable circumstances, is out of the question ; and, to obtain the requisite in-patient treatment, a detention order must be obtained : furthermore, if the case is sent to a public mental hospital other than as a private patient, her discharge, on abatement of the symptoms and notwithstanding her admission was probably initiated by the husband, cannot be claimed either by the patient or her husband, but requires an order of the Visiting Committee.¹ Is not this a travesty of liberty, a despotism raised out of a will-o'-the-wisp abstraction, and a double outrage, for mother and infant, equally helpless, are both involved ? The cry, “O ! liberté ! que de crimes on commêtet dans ton nom !” truly needs not the guillotine for its utterance.

¹ This statement is substantially true, but the effect of Sect. 49 of the 1890 Lunacy Act provides, though in a somewhat cumbrous fashion, a mode of intervention by the Commissioners.

It has occasionally been my province to discuss these matters with those who are firmly opposed to the slightest relaxation in the lunacy law. My experience on more than one occasion has been that the accuracy of my statement as to the law has been at once challenged, and this contention was reinforced by the citation of the case of a near relative acutely mentally ill, who, under medical advice and direction and to the complete satisfaction of my contender, was being treated without certification or other objectionable formalities in a nursing home. All was well in his eyes: certification had been mentioned to him, but he would under no circumstances have consented to it; the patient was not in a condition to object, and he himself had full confidence in the steps being taken for treatment, so where was the necessity of her certification? and so forth. But, on its ultimately being brought home to him that his relative was in illegal charge and that the person in charge, if he cared to give me the name and address, could and probably would be prosecuted, his conversion was instant, and was proclaimed by the vehemence of his remark, "Then the law ought to be altered." Nor was the opportunity lost to explain further to him that, if the much-to-be-desired alteration had been in force, his relative could not only have been treated where he desired without contravention of the law, but her case would have received that independent supervision which centuries of experience shows is necessary if the care of mental cases is to be kept free from abuses; and furthermore, that the nature of the supervision need not include demand for knowledge of the patient's name, save in the event of something seriously unsatisfactory in the arrangements being apparent. As individuals it is only occasionally that opportunity of such propaganda work presents itself to us; but, if each member does his share the collective influence of the Association can indeed be great, and, except we bestir ourselves and help those who are willing to see the desired measure of relief granted, the medical treatment of incipient mental disorder is in risk of remaining indefinitely in shackles. It is worth remembering that during the years—particularly the last decade—we have been arguing the matter in this country, the measures we advocate have been put into operation in the Union of South Africa in a consolidating enactment, entitled the Mental Disorders Act of 1916, upon which those responsible for it may be warmly congratulated, and concerning which we are to learn something in the course of this meeting from their Commissioner in Mental Disorders (Dr. J. T. Dunston), whom we are glad to welcome back among us. If a single criticism of it is not out of place, exception may be taken to the limit of fifty days—which is much too brief for effective treatment—during which the patient can be retained uncertified, and which contrasts unfavourably with our projected period of at least six months.

SUGGESTIONS, THOUGH COMPREHENSIVE, MUST HAVE REGARD TO EXISTING FINANCIAL CONDITIONS.

The lengthy manner in which have been set out the legal difficulties of our present position and the way in which they obstruct progress in psychological medicine, tedious though I fear its exposition has been, enables suggestions to be made as to what are the needs of our specialty in any scheme of medical services much more concisely than would otherwise have been possible, and renders it possible to point out what can be accomplished forthwith and what has to await the Legislature's goodwill. But as to immediate possibilities, if we are to gain a hearing and not be regarded as visionaries, it must be apparent that during this period of straitened finance, our administrative proposals must be strictly confined to such as involve neither capital expenditure nor increase in cost of maintenance other than that which can truthfully be said to be essential for treatment; and the possibility of even the latter may be doubtful, if redoubled efforts to economise in other directions are not made. That common-sensed policy, imposed by the rigour of circumstances, need not, however, debar us from including in our perspective facilities admittedly costly, to be provided when money is available, and which we believe requisite, as well for medical education as for treatment—preventive and curative: without their mention we might indeed fail to be understood.

THE REPORT OF THE CONSULTATIVE COUNCIL ON MEDICAL AND ALLIED SERVICES.

Our country's history bespeaks our innate preference to develop existing structures rather than build upon a *tabula rasa*, a preference consistently shown in the interim report of the Consultative Council on Medical and Allied Services, established under the Ministry of Health Act of 1919. This report was issued in May, 1920, and corresponding ones have been made by the Welsh Consultative Council, by the Consultative Council of the Scottish Board of Health, and by the Irish Public Health Council. With these highly interesting and important communications, time compels me to assume considerable familiarity on your part, but their contents will well repay your close perusal, if they have not already had it,¹ and a useful summary of the one first mentioned, together with many illuminating questions and answers arising therefrom, can be consulted in the *British Medical Journal*.²

The title of my remarks has been purposely directed to these reports because, firstly, there is obvious advantage in having a scheme which

¹ Each is obtainable at H.M. Stationery Office in London, Cardiff, Edinburgh and Dublin.

² Pp. 151-5 of the Supplement to the *British Medical Journal*, April 30th, 1921.

has been shaped by highly competent hands largely out of existing structures, and which therefore—whether it matures soon or late, and with or without modifications—affords a reasonably secure basis on which we can formulate suggestions to meet any special facilities demanded for preventive, curative and custodial treatment of mental and allied disorders; and secondly, as has been elsewhere remarked, only brief and occasional reference to these disorders is made in the reports.

(1) REFERENCES TO PSYCHOLOGICAL MEDICINE IN THE COUNCIL'S REPORTS.

The **Irish Report** takes full cognisance of institutions for the insane, and specific reference is made in it to recommendations conveyed by a deputation from the Irish Division of the Medico-Psychological Association, but as the Council, set up to formulate proposals to be embodied in an Irish Public Health Bill, have included in their recommendations the establishment of a national medical service for Ireland, from which would be provided the medical staffs of mental hospitals—a proposal which finds no counterpart in the reports from the other portions of the United Kingdom—and as no Ministry of Health has yet been established there, it would be premature for my present purpose to make more than this passing allusion to it, full of interest though it is.

The **Consultative Council of the Scottish Board of Health** included among its members our President-Elect, Prof. George M. Robertson; therefore, although specific reference to mental illness is confined in their report to a paragraph¹ advocating preventive or rest homes for those suffering from over-strain or threatening illness, physical or mental, we may be sure that the matter did not escape attention, and it has to be remembered further that the provision of hospital accommodation, together with its place in relation to the medical service of the nation, was specially referred to a joint committee which had not then reported.

The **Welsh Report** and the reports made to the Council by its committees for typical areas contain several allusions to existing and future provision for mental cases: (i) *The committee appointed to consider the arrangements required for an area both industrial and urban (with a population of 100,000)*, expressed the opinion that the existing general hospital (at Aberdare) could be expanded and adapted as the principal local centre of the area, and, among the eight departments (each to be capable of future extension) which they advised should be comprised in this centre, was one described as "various clinics, *e.g.*, dental, tuberculous, venereal, pediatric, *psychiatric*, etc." The point is not quite clear, but the context suggests that beds are not contemplated in the psychiatric clinic; nor, although mention is made of an existing open-air school with 140 children (mental and physical defectives) on the roll, is it stated, in the description of existing and future institutional accommodation, where mental cases are now or should in future be treated, except for a general statement that the main central institutions in Cardiff would be available for cases of special character. (ii) *The committee, appointed to consider arrangements for a mixed industrial and rural area (East Carmarthen, with a population of 100,000)*, included within their purview of available institutions the county hospital and the mental hospital at Carmarthen, neither of which, as they pointed out, is actually within the area, and they stated that the latter, though very full and serving the three counties of Carmarthen, Cardigan and Pembroke, may be regarded as providing the necessary facilities. In recommending the provision of a central institute (at Llanelly) arranged in two parts—one centralised in the town and comprising various clinics and the out-patient department, and the other, consisting of the main hospital, laboratories, etc., some distance away from the centre, and on a site of about fifteen acres—the provision of a *psychiatric clinic* at the centre is stated to be desirable; whether such clinic implies bed accommodation again is not clear. It is added that cases requiring

¹ Para. 27 (c) on p. 16 of the Report.

further treatment would be drafted to the main hospital, except cases of tuberculosis and mental disorder, the latter to be sent to the county mental hospital at Carmarthen. The committee also expressed the opinion that Swansea should be regarded (as at present) as the centre for a large and fully-equipped institution to serve this East Carmarthen area for all cases requiring, from their unusual nature, special treatment. In this connection, and as the committee were empowered to disregard existing local government boundaries, a note of surprise is perhaps permissible that, in their new health scheme, no inclusion is made of the mental hospital for 600 beds which was in course of erection for the county borough of Swansea and Merthyr Tydvil, and which, it may be assumed, will ultimately be completed. No allusion is made to provision for cases of mental deficiency. (iii) *The Rural and Semi-Urban Areas Committee*, in selecting the mountainous county of Merioneth, with a population of 45,500, as a type, point out that the only existing hospital in the area is a small local one (eight beds), maintained by the owners of certain quarries for the treatment of accidents, the quarrymen themselves also contributing out of their wages towards the cost of the operations. The opinion was formed that such an area does not lend itself to the provision for its own purposes of a central hospital institution, and the committee was driven to the conclusion that, for the provision of central (major) institutions, it would be advisable to regard at least the whole of North Wales as a single area. It is of interest to us to note that on this assumption they recommended, besides the provision of three general hospitals, a tuberculosis sanatorium and an adequate number of convalescent and rest homes; that a *mental hospital*, with beds for 1,000 patients, and an *institution for mental defectives*, with at least 300 to 400 beds, should be available and conveniently accessible from all parts of North Wales; they further recommended adequate and separate provision for *epileptics*. They made no specific reference to the mental hospital at Denbigh, which, with its 1,000 beds, is already available for North Wales.¹ In considering the needs for local institutions within the area (Merioneth), they thought that two or three might be necessary, but that, if suitably placed, they might also serve contiguous areas, and, in outlining their accommodation, they included, besides beds for general and maternity cases, a variety of clinics, among which is mentioned *a clinic for mental cases*.

The Report of the Consultative Council in reference to England made reference to mental diseases (and epilepsy) only in their paragraphs relating to supplementary services,² amongst which are mentioned "hospitals for curable and incurable mental disease," "institutions for the feeble-minded" and "epileptic colonies." In a timely paper in the *Lancet*,³ Dr. Edwin Goodall drew attention to this point, and emphasised it by saying: "Incurable mental disease could be adequately provided for thus, but not curable. The psychoses and psychoneuroses together contribute a vast and oppressive liability, which, I maintain, cannot be discharged through the medium of a mere supplementary service. They were long since shunted on to the sidings of the main traffic of disease, where they have remained, mainly stationary. They, with their medical and nursing services, have long suffered, and still suffer, all the evils of segregation." Doubtless we should have liked to see them specified at least with the nine special services enumerated under the equipment scheduled as appertaining to the proposed secondary health centres. It is, however, within my knowledge that the reason why the requirements for dealing with mental and allied disorders—especially from the preventative and curative aspect—were not more elaborated, was not lack of appreciation of the importance of the matter, but rather the complexity of the problem, adequate solution of which still awaits legislation.

(2) OUTLINE OF CONSULTATIVE COUNCIL'S SCHEME.

The report of the Consultative Council formulates a scheme for the supply of medical and allied service which has as its pivot the work

¹ That is, for the counties of Denbigh, Flint, Carnarvon, Anglesea and Merioneth.

² Paras. 14 and 74, pp. 6 and 15 and the summary on p. 25.

³ *Lancet*, September 11th, 1920, p. 541.

of the general practitioner, maintains the voluntary hospitals as an essential part of the scheme, and emphasises the inseparability of preventative and curative medicine. Its framework, as regards each area into which the country would be divided, is a constellated system of health centres of three magnitudes—the teaching hospital with its medical school at the hub, secondary health centres and primary health centres ; and along the links between a constellation of primary centres and their secondary centre, and between two or more of the latter and the teaching centre, activity would be both centripetal and centrifugal. Services especially for patients requiring institutional treatment of specialised kinds (among which are included mental hospitals, institutions for mental defectives and colonies for epileptics) are mentioned as correlated to both primary and secondary health centres, and are designated “supplementary services.” Doubtless direct correlation between supplementary services (centres) and the university centre (teaching hospital and medical school) is not intentionally excluded ; it is, at any rate, a need which many of us feel and have urged with respect to mental institutions. For purposes of local co-ordination, and to give effect to unity of idea and purpose by securing reciprocal communication between the associated centres, the erection of a new type of health authority is postulated, upon which the medical profession would be effectively represented and associated, with which would also be a local medical advisory council. Complete co-ordination between the various areas would be effected within the Ministry of Health.

The vista such a scheme opens out is an appealing one and incites to be up and doing. Let us, therefore, set down what services (treatment facilities) our sphere of work can at the moment offer for inclusion in such a scheme, what services are needed to complete our share—pointing out those which can be arranged without expenditure of money, the points in the Council's scheme at which our sphere impinges, and what arrangements at each point are needed for its inclusion.

(3) PROJECTED LOCAL HEALTH AUTHORITY.

The projected local health authority itself demands some notice ; for it has to be remembered that—apart from the fact that certain institutions, organised as permanent units for cases of mental disorder and mental deficiency and others more or less temporarily so organised, are under the Poor-Law authorities—the managing bodies of public institutions for the insane and mental defectives are the statutory committees of county and borough councils ; and that, if it is desired to secure effective representation on them of the medical profession, it

would be necessary to co-opt medical practitioners upon them. Co-option is not provided for in the Lunacy Acts, but it is in the Mental Deficiency Act, which also enables the Mental Deficiency Committee to be appointed, subject to the consent of the Minister of Health, as the statutory Asylum (Mental Hospital) Committee; and this, indeed, seems to be the way out of any difficulty in arranging for these institutions to come under a health authority constituted on the lines suggested in the report.

(4) DOMICILIARY SERVICE.

(i) *Relation of general practitioners to psychological medicine.*—Domiciliary service is defined as the first element in the scheme, and as comprising the services of the doctor, dentist, pharmacist, nurse, midwife, and health visitor. Its consideration for our purposes at once raises the question of the relationship of the private practitioner (general or specialist) to psychological medicine—a difficult, but most important matter. The certification of cases under the Lunacy and Mental Deficiency Acts is one of the now many duties which all medical practitioners are liable under statute to have to perform. An enumeration of them is to be found in Sir George Newman's interesting contribution to the discussion which took place last year at Cambridge on the future of medical practice.¹ But with respect to the actual treatment of mental disorders, domiciliary service, as rendered by medical practitioners in their surgeries, consulting-rooms, and in the homes of the families they attend, is almost entirely confined to patients in well-to-do circumstances, and is in the hands of almost none but specialists. Most general practitioners seem to regard mental disorders so much as an exotic in general medicine that, frankly owning their lack of experience in their treatment, they are only too willing it should be taken in hand by others. This is a great misfortune, for, while my sympathies are more with their attitude than with the "therapeutic nihilism" of those who accept the post of medical attendant to patients in single care and in urgent need of active mental treatment, but who confine their ministrations chiefly to attention to the patients' general health, it is my strong conviction that the general practitioner could, under suitable arrangements, be of the greatest possible service to the cause of psychological medicine. It is he alone who, while in attendance on one member of the family, has the opportunity of observing with a trained eye other members regarded as bodily and mentally sound, but in whom he, however, recognises interesting traits and temperamental peculiarities. Were he encouraged to be systematic in such observations and to adopt some method of recording them, they would be of inestimable value in collecting reliable data for that which

¹ See *British Medical Journal*, July 10th, 1920, pp. 33-36.

in our work might well be called the "research magnificent"—in other words, a knowledge of the prolegomena and earliest stages of mental disorder. Whether in "nativity, chance or dearth," it is he more than anyone else—not even excepting the priest—whose profession brings him into the most intimate and confidential social life of the people, both communally and in the family. It is he who, preferably in conjunction with the "health visitor," might be able to give us many a hint which, by putting the specialist on the track of events and troubles—those *res angusta domi* apparently insignificant at the time and forgotten by the patient—which would be invaluable in the application of psychotherapy; of not less, and perhaps of still more importance, it is he who can tell us of the temperament, mental make-up and behaviour of those members of the household under whose influence the patient has been in early childhood. The importance of this last item—as to which Dr. Mapother¹ will give us some illustrations—is continually being thrust upon me, and, firm believer as I of course am in the operation of heredity, I am inclined to place the influence of irresistible imitation (*ex infectione*, as it were) certainly not less high than that of heredity. Many a neurotic and mentally affected patient is said to have inherited his morbid make-up when in reality he was "infected" with it; and verily there is a romance of personality as well as its birth.

HEREDITY.

Heredity, in my opinion, has been dressed far too much as a bogey, especially in relation to mental disorders; and while its malign influence is a favourite topic for charts and statistics, perhaps accurate enough as far as they go, how rarely are we shown the obverse, with its reminder to "weigh our sorrow with our comfort." So axiomatic has its relation to mental disorders become that many persons, because it happens they have had in their family more than its share of cases of mental breakdown, live their lives in terror, and in obedience to a spectre, a veritable *hereditas damnosa*, they distort them accordingly; whereas, had they taken their skeleton out of its cupboard, and discussed it freely with a physician who does not regard all mental disorders and deficiency as a mass of homogeneous insanity, they might have been vastly comforted; indeed, cases have come under my notice in which, when the much-feared breakdown does occur, the long-endured dread has seemed to me to have itself been the principal agent—"mad from life's history" might well be said. In my judgment, our knowledge of the laws of hereditary mental and nervous phenomena is too slender to warrant advocacy either of segregation or of surgical interference solely on the score of betterment of the next generation, and the only safe guide in this relation is a consideration of the ability of the subject to perform the duties of parenthood.²

(ii) *Influence of the general practitioner in promoting mental hygiene.*—But to revert to the rôle of domiciliary service: it cannot be overlooked that in many cases of active mental disorder removal from home, either

¹ "Phantasies of Childhood and Adolescence as a Source of Delusions," by Edward Mapother.

² See Section "Insanity in Association with Child-bearing," by C. H. Bond, in Berkeley and Bonney's "Difficulties and Emergencies of Obstetric Practice," 1st ed., p. 113.

to single care or to an institution, has been accepted as an essential preliminary to successful treatment. In the light of what it is proposed to say as to primary centres, this hitherto cardinal principle may admit of some modification, but so far as it holds good, it manifestly limits domiciliary service considerably. Hitherto the general practitioner has not been in a position to do much in the way of mental treatment, owing firstly—as he would himself be the first to say—to lack of training, and secondly, to the too great encroachment on his time which it involves. The latter reason will, as regards certain cases, always hold good, and the former will not be remedied until the physiology teachers find a niche for psychology in their courses, and until the clinical instruction given to students includes better facilities for the teaching of psychological medicine, especially the study of incipient and early cases of mental disorder—preferably in a psychiatric in-patient clinic as a unit of the teaching hospital. Even if provision of these urgently required clinics out of public funds must be abandoned temporarily, and could there be obtained the legislation necessary to liberate medical action, much could yet be done to bring about these educational reforms without the expenditure of a penny. There is not the slightest doubt but that their accomplishment would enable the general practitioner to be a powerful agent in promoting mental hygiene ; for, while he would continue to hand over, for institutional or single-care treatment, most cases of active mental disorder to the specialist—who, as regards single-care cases, and if one may say without offence, too often assumes the position of consultant instead of medical attendant—his widened knowledge would enable him to nip in the bud many a threatened derangement.

As to research in mental disorders and deficiency, and whether it is fair to expect a general practitioner in the course of domiciliary service to conduct such work on serious lines, admits of considerable doubt. Doctors are in no danger of being stigmatised as grasping, nor in relation with their patients has cash payment ever “become the sole nexus of man to man.” Nevertheless in their all too leisureless lives, and where the loss of an hour can be estimated in cash, it seems only reasonable that, if they are asked to make records outside the actual requirements of their clinical work, some remuneration should be forthcoming. For example, were the responsibility of directing a mental hospital again mine, among other lessons I have since learnt is the great value to be reaped from a full report from the family doctor of every case admitted ; and for such a report one would like to be in the position to offer a fee : some such system would immensely stimulate general practitioners to be on the alert to observe and record facts from the byways of medicine. Again, if the prevention of the occurrence of disease is seriously expected to be based on the domiciliary medical service, would not the most effective means be to take a leaf out of our

dental colleagues' book,¹ and to make a determined effort to educate the public regularly to consult the family doctor in health as well as in sickness? It is undeniably true, and probably happily so, that our countrymen, as lately emphasised by Dr. Addison in the course of the Cavendish Lecture,² will never consent to have their lives directed by doctors; yet submission to the removal of the whole of their teeth on the *ipse dixit* of their dental surgeon (whose advice is doubtless given on good grounds), seems not difficult to obtain, whereas the advice, hygienic or personal, tendered by the family doctor at his routine occasional visits would indeed be rarely anything like so drastic. Nor is there need, through over-zeal or lack of tact, to fear the retort—"Thou art always figuring diseases in me, but thou art full of error: I am sound."

(iii) *Certification, when necessary, preferably by the family doctor: unnecessary use of existing emergency procedure.*—Assuredly the general practitioner should have the power to summon a consulting alienist irrespectively of the patient's means. The consultant ought not to be otherwise accessible, and apart from large towns, and not even entirely excepting them, who is there so suitable—indeed, in many districts the only one available—as a medical officer of the public mental hospital or institution for mental defectives? As to this suggestion, the cost of which would be mainly travelling expenses, and these probably met by the saving of later and more expensive treatment, more will be said under "Institutional Treatment." Furthermore, while privately arranged procedure cannot override the statutory position under the Lunacy Acts of the relieving officer, overseer, constable, and Poor-Law medical officer,³ yet in practice more could and should be done, so that institutional treatment is not invoked except on the recommendation of the family doctor. Pursuing this train of thought still further, it seems to me a misfortune that when certification for the purpose of obtaining admission to a public mental hospital is needed, the services of the family doctor are not more frequently and as a matter of routine called in. Such a custom would be in harmony with the spirit of these Acts; for, while the Justice is empowered to call in whomsoever he chooses,⁴ yet when procedure (under Section 13) entailing two medical certificates is used, he is enjoined to proceed so far as possible as if making an order on petition, in which one of the two certificates must, if practicable, be under the hand of the regular medical attendant. The divorce of

¹ See remarks by Prof. G. Hopkins on the "Future of Medical Practice from the Point of View of Medical Research," *British Medical Journal*, July 10th, 1920, p. 41; and by Sir James Mackenzie, *British Medical Journal*, June 5th, 1920, p. 783.

² "On the Part of the State in the Prevention of Disease," see *British Medical Journal*, June 25th, 1921, pp. 940-2.

³ See Sections 13 to 16 and 20 Lunacy Act, 1890, and Section 2 of the Amending Act of 1891.

⁴ See Section 16, Lunacy Act, 1890.

the family doctor in this matter has doubtless come about partly from the much too general and often quite unnecessary use of Section 20¹ of the Act of 1890, under which persons are taken upon the relieving officer's "three-day order" to the Poor-Law institution, whence, within the ensuing six days—a period which, under a somewhat devious procedure,² can be extended to some forty days—the patient is removed to the county or borough mental hospital. Section 20, highly useful as it is, was framed to meet emergencies, and the other sections² to meet special circumstances and provide for a period of observation; but when the desirability of mental hospital treatment is obvious and there is no emergency necessitating the immediate provision of accommodation for a night or so, it is wrong, on both sentimental and medical grounds, to submit the patient to this procedure for mere purposes of administrative convenience. By those patients not too ill to realise it, it is greatly resented—as many a one has told me; and, as doctors, we know that the quicker the patient reaches the place of treatment the better, and that, once there, any transfer or dislocation of treatment is greatly to be deprecated. It is for this reason that the institution of anything in the nature of a "clearing house," when providing for mental cases, to my mind is bad administration if it can by any means be avoided.

Some magistrates, too, are not blameless in this matter, in that they affect, not only to satisfy themselves that all is in order, and that in the light of the medical testimony the patient is of unsound mind, but also to constitute themselves judges as to whether the patient *need* be sent to the mental hospital. This is an echo of the time when the main idea in sending a person to an asylum was not so much the treatment he would obtain there as his and the public's protection, and of the altogether-to-be-condemned notion—still too prevalent—that the asylum is the last place to send a person for whom one feels regard. Perhaps the designation of these institutions as mental hospitals will do something to banish this attitude, but probably of still more effect would be the invariable association of the family doctor with the procedure.

(iv) *Need of improvement in emergency procedure for admission to county and borough mental hospitals.*—The hardship inflicted by an

¹ The section reads: "If a constable, relieving officer, or overseer is satisfied that it is necessary for the public's safety or the welfare of the alleged lunatic with regard to whom it is his duty to take any proceedings under this Act, that the alleged lunatic should, before any such proceedings can be taken, be placed under care and control, the constable, relieving officer, or overseer may remove the alleged lunatic to the workhouse of the union in which the alleged lunatic is, and the master of the workhouse shall, unless there is no proper accommodation in the workhouse for the alleged lunatic, receive and relieve, and detain the alleged lunatic therein, but no person shall be so detained for more than three days, and before the expiration of that time, the constable, relieving officer, or overseer shall take such proceedings with regard to the alleged lunatic as are registered by this Act."

² See Sections 21 and 24 of the 1890 Lunacy Act.

invariable and unnecessary use of Section 20, which prevails in some localities, would be mitigated were the place of safety—provision of which is the object of the section—not restricted to Poor Law institutions; but whatever be the place of safety, any needless halt in reaching the place where the actual treatment of the case is to be carried out is strongly to be deprecated. Satisfaction to relatives and to the majority of patients would be promoted, and difficulties felt by magistrates in this matter would be minimised, were it possible for patients requiring to be sent to county and borough mental hospitals to be admitted thereto on an “urgency order” comparable to the mode of admission as a private patient, which can be, and so often is, employed as a preliminary to the completion of an order on petition. Many advantages might accrue from this suggestion, which was among others put forward in 1918 by the English Lunacy Legislation Sub-Committee of this Association.¹

In what has just been said concerning domiciliary service no little reference to institutional services has been unavoidable, and, in now proceeding to consider those services my remarks can be correspondingly curtailed.

(5) INSTITUTIONAL SERVICES.

Institutional services are explained as comprising primary and secondary health centres, teaching hospitals, and supplementary services; as already stated, it is only among the last-named group that the Report makes mention of institutions for mental cases. But that it was intended or wished to confine psychological medicine to that circumscribed domain we need have no fear, nor indeed should we be right in being content with such a sphere when we bear in mind the important functions assigned to primary centres.

(i) *The primary centre: Should be available for out-patient treatment of mental cases; importance of, and no obstacles to, this form of treatment.*—The primary centre, it is said, “would be the home of the health organisation and of the intellectual life of the doctors of that unit,” to which may be added the view of the Post-Graduate Medical Committee² (appointed by Dr. Addison and presided over by the Earl of Athlone), that insufficient use is being made of cottage hospitals in country districts, which, it is suggested, ought to be outposts of post-graduate study.

It is unthinkable that considerations appertaining to the mental health of the community can be ignored at such important units as these centres are foreshadowed to become. But whether—apart from

¹ See *Journal of Mental Science*, January, 1919, p. 43.

² Their report, obtainable from H.M. Stationery Office, was published in May, 1921, and see *British Medical Journal*, June 25th, 1921, pp. 942-6.

their convenience for mutual discussion between practitioners and for lectures on mental hygiene, which, if graded in scope for adolescents and adults, could be made of much utility in promoting communal mental health—these centres can be turned to account in the actual treatment of mental cases, to my mind depends entirely on whether an out-patient department forms part of their arrangements. It goes without saying, and, indeed, is specifically contemplated, that such a department will be found at secondary and university centres; but the point—vital for our purposes—is left uncertain with respect to primary centres, and there is the ominous opinion of the Council of the British Medical Association¹ that the establishment of out-patient departments for purposes of general treatment would be entirely unnecessary and undesirable. It is greatly to be hoped that this opinion arises out of misunderstanding, and out of an ungrounded fear of encroachment upon the sanctity of the practitioner's surgery and consulting room, and that it will not prevail. The point has been characterised as vital because of the doubtful wisdom of the policy were we to ask for provision (ordinary or special) for beds and in-patient treatment of mental cases at these primary centres, and because of my firm conviction that a hitherto quite unrealised volume of psycho-therapeutic out-patient work could be accomplished at these centres; not only among psycho-neurotic and borderland cases, nor even confined to cases of incipient psychosis, but also in patients that have reached a certifiable stage of mental disorder; and again also in the treatment of so-called moral imbecility; nor should mention be omitted of the great convenience such centres might prove for the examination of school children and others for mental deficiency, suspected on account of failure or delinquency, etc.

It is my strong belief that this place and form of treatment would be productive, if in the right hands, of most gratifying results, would save much distress and incapacity arising out of that feeling of self-insufficiency associated with neurotic ailments, would cut short many an incipient mental breakdown, and in a certain number of more fully-developed cases would obviate institutional treatment. Given the requisite physicians, all this might be widely put in operation to-day without any expenditure other than travelling expenses; in point of fact it does exist at a few centres, and, in the paper to-morrow on "The Oxford Clinic," by Dr. T. S. Good, we shall learn details of what can be done in this direction.

For the successful application of out-patient treatment to mental and allied disorders, not only in results of treatment but in the extent to which cases in the locality avail themselves of it, at least two factors

¹ See *Supplement to British Medical Journal*, April 30th, 1921, p. 152, para. 16, and answer to Question 9, p. 154.

are essential : one is that those who undertake the treatment must be thoroughly competent, and the other necessitates out-patient provision for miscellaneous illnesses—the greater the variety the better. The reason for the latter factor is that many persons—and they may be the ones whom it is most desirable to reach—shrink from presenting themselves at a treatment centre that gets known as dealing only with mental and nervous cases ; there are also other reasons, which need not be entered into here, why most of us would rather conduct this work in a well-arranged out-patient department than at the patient's home or in a surgery. As to by whom the treatment should be undertaken, it will save repetition if the matter is left to be considered under secondary and teaching centres ; but the necessity of skill and competency cannot be too much insisted on, and therefore the work must not be relegated to those who are comparatively junior, as is unfortunately the custom in most general out-patient departments. Moreover, those who carry out the work must be prepared not only to give the time for it, but, in the case of patients still able to continue in employment and who are not masters of their own time, the doctors may have to arrange the hours of their attendance accordingly.

(ii) *The secondary centre : Should be available for mental cases, both as out-patients and in-patients ; for the latter, legislation probably necessary.*

—The secondary centre is described as located in towns in one building or more (preferably, but not necessarily, occupying the same site) ; efficiently staffed with consultants and specialists ; adequately equipped with laboratories and such other ancillary services as pharmacy, radiology, electrotherapy, hydrotherapy, radiant heat, physical culture, massage and nursing ; and closely linked up with other centres by an ambulance service, all these desiderata having as their object the supply and maintenance, at a high standard, of general medical and surgical services and certain special services, nine of which are enumerated, but among which psychological medicine has so far not been included. We shall be forgiven if we cast more than longing eyes upon such an important unit.

In the first place all that has been said as to out-patient treatment at primary centres applies with even greater force in respect of secondary centres, except for the fact that necessarily they will not usually be so accessible for patients. That point must not be overlooked ; but, apart from it, the institution of out-patient treatment at all such existing general hospitals as can be said to correspond with what is meant by a secondary centre would, owing to the dearth of available physicians, be administratively easier to accomplish than at more scattered centres, and surely ought to be proceeded with at once. It is really remarkable, in the face of the admitted importance of nervous and mental illnesses, how many large general hospitals, possessing an otherwise strong

visiting staff, including specialists, are without a neurologist or psychiatrist, or—and better still—a neuro-psychiatrist who, as a foundation for his work, has a knowledge of neurology, psychology and psychiatry: this, too, when sometimes there is at least one such specialist practising in the vicinity of the hospital, and available.

But in regard to secondary centres, it is submitted that we cannot be content with facilities only for out-patient treatment, and that, although general hospitals have hitherto fought shy of making in-patient provision for mental cases, such provision is urgently required, not on the ground that there are not vacant beds in public institutions for mental cases (for there are), but on account of the evil results to patient, physician and student that have accrued from the divorce of psychological from general medicine. The need of more expeditious hospital treatment is widely prevalent, most general hospitals being already short of accommodation, and that is doubtless one reason why those of them that have expressed a readiness to allocate beds for mental cases are so tardy in doing so; so far as known to me, none in this country has done so yet. But deeper than that reason, there is a reluctance and some timidity in taking a step that may be fraught with responsibility of a novel kind, and that demands a knowledge of matters in which the managers and staff may have hitherto had no experience. The establishment of psychiatric clinics (for in-patients as well as out-patients) is part of the declared policy of this Association, and it is therefore our duty, individually¹ and corporately, to do all in our power to break down this reluctance and apprehension; for instance, were general hospitals to be circularised by the Association upon the matter, good might emerge in at least some quarters; again, Visiting Committees of public mental hospitals—and a move from them would be less invidious than from the medical superintendent—either as a body or through individual members, might usefully approach the Committee of Management of general hospitals in their area.

But there are these reservations to make: to escape irritating difficulties, legislation (which need be only permissive and non-committal as to expenditure of money) is practically unavoidable to enable in-patient mental cases to be received; that, while a few beds or a small ward for mental cases on each side of the hospital would be a welcome step and would probably be productive of much indirect good, it would only very partially cope with the requirements we have in mind; and that adequately to meet them, a specially-designed structure is necessary which would be difficult to arrange for within the accommodation for general cases, and which, because also of the desirability

¹ See "*The Position of Psychiatry and the Rôle of General Hospitals in its Improvement*," by C. H. Bond, *Journal of Mental Science*, January, 1915, and *Lancet*, December, 1919; "*The Co-ordination of Clinical Research and the Position of Psychiatry*," by E. Goodall, *Lancet*, August 2nd, 1919, p. 116, and *ibid.*, p. 205.

of a certain amount of garden, almost necessitates a detached structure as an annexe to the central building. The ideally-disposed psychiatric clinic would seem to be its inclusion among several disparate units on the same site and which together form the general hospital, the whole being known under one name. For it to be effective, the requirements of such a structure involve considerable elaboration, and its construction would be far too costly to expect either general hospitals or local authorities to face such expenditure during the nation's straitened circumstances. While these prevail, the best that can reasonably be hoped at a non-teaching hospital is the adaptation of a part of it (preferably a detached unit) and its utilisation for mental cases, and certain of the municipal hospitals are the only ones that seem at present in a position to spare such accommodation. Different considerations are, however, perhaps permissible in the case of the third form of institutional accommodation, namely :

(iii) *The University centre: Should provide a psychiatric clinic, and thoroughly organised teaching in psychological medicine, as well as treatment facilities.*—The University centre with teaching hospital and medical school, by its very name, connotes the inclusion of all teaching that appertains to medical science, and the exclusion of any one of its recognised branches must always be a source of weakness.

THE WAR'S LESSONS AS TO DEARTH OF EXPERTS AND AS TO INSUFFICIENCY OF TEACHING IN PSYCHOLOGICAL MEDICINE.

How serious is this weakness may be gauged from the huge number of psychoneurotic and psychotic invalidings during the war. These were in no way novelties which could be counted on to disappear into medical history with the clearing up of the war's aftermath; the war merely forced our profession and the laity to realise, by having the cases presented to them in mass-formation, the large number of neuropathic persons there are who "carry on" in civilian occupations, battling with their feelings of self-insufficiency as best they may, and the still more numerous others in whom these conditions are latent. But the war did more, in that, owing to the presentation of these cases in their thousands, it forcibly drew attention to their curability, provided that really skilful treatment at the hands of specially trained doctors was obtainable. To-day, as the result of schemes of intensive training, put in force by the Director-General of the Army Medical Service and carried out largely by mental hospital physicians, there are many times more doctors capable of carrying out this treatment than there were before the war, but still by no means sufficient to cope with what is required. This shortage is the more serious because, if the Universities are unable to provide the requisite teaching—and most of them seem willing enough to do so if means were forthcoming—the number of specially trained doctors will gradually diminish after the extra-mural emergency teaching centres have closed down, and because the available teaching for existing mental hospital physicians, who are without this special training but eager to get it, is as yet far from accessible to many of them.

NEED OF SCHOOLS OF PSYCHOLOGICAL MEDICINE.

A very strong case, therefore, presents itself for vigorous action at University centres, and the wiser course would seem to be—while doing all possible to get mental out-patient work instituted at every secondary centre and at such primary ones as practicable, and while encouraging, where circumstances are favourable, the establishment of in-patient clinics at secondary centres—to concentrate our efforts at University centres. No University granting medical degrees should be

content without its School of Psychological Medicine, by which is meant a team of teachers giving instruction in the comprised subjects,¹ adequate clinical and laboratory facilities, and lastly, but not least, a regular supply of undergraduate and graduate students with their sprinkling of research workers. None will doubt the wisdom of the Post-Graduate Medical Committee in urging separation of graduates from undergraduate teaching, but psychological medicine is a branch in which this principle is probably sufficiently and best adhered to at most places, save perhaps in London, by arranging their respective tuition at different hours.

As to adequate clinical and laboratory facilities, the matter would be met in the main by the existing ones in or attached to the medical school; but clinical requirements cannot be said to be satisfactory at any centre as yet, the deficiency being especially in the field available for the study and treatment of cases in their earliest stages, and the prevailing necessity to rely entirely on the mental hospital, usually situated at a considerable distance from the teaching hospital. These clinical requirements comprise (a) a supply of neurological cases preferably collected in special wards or in a detached unit of the hospital; (b) the psychiatric clinic located in the manner already indicated, but with provision for its out-patients forming part of the hospital's general out-patient department, and (c) the county or borough mental hospital and the corresponding institution for mental defectives, which, if regarded as part of the supplementary services,² ought to be brought into intimate relation with the University centre, as well for their own sake as for the supply, for teaching purposes, of certain stages of mental illness which will always be best studied at a large mental institution.

ABSENCE IN THIS COUNTRY OF PSYCHIATRIC CLINICS.

Apart from the Maudsley Hospital, which still awaits equipment and organisation, and the arrangements now being made at Bethlem Hospital, our country is totally without a psychiatric clinic providing in-patient treatment—a most lamentable statement to have to make—nor do either of those two hospitals form an integral unit of a general hospital. It is, however, only fair to remember that at mental hospitals—which for so many decades have borne the heat and burden of the day's work in the difficult task of treating mental illnesses, and where, I am convinced, it will continue to be borne—the practice has been growing up of providing detached buildings, generally spoken of as "admission" or "acute" hospitals (the latter term, it is hoped, will fall into disuse), for the reception and treatment of recent cases, with small, ancillary villas for convalescing patients.³ These admission hospitals are prototypes of the psychiatric clinic, and the best of them contain many of the essentials of what is meant by that term; still, as any University centre desiring to provide itself with one would naturally seek to know what we have in mind, and although they will doubtless not be stereotyped in design, but will reflect the application of many minds, the following particulars may not be out of place.

THE PSYCHIATRIC CLINIC: ITS REQUIREMENTS.

The psychiatric clinic (1) should not have more than two storeys for use by patients; (2) should contain day-rooms for sitting and dining purposes, with two or three still smaller sitting-rooms for the use of one patient and nurse, dormitories, and a sufficiency of single rooms; (3) all these rooms so arranged as effectively to protect quiet and sensitive patients from the distressing symptoms of disturbed and actively acute cases, each of these two groups of cases probably needing facilities for further subdivision; (4) a small solarium and liberal verandah space to provide open-air treatment, so distributed as to enable the classification just indicated to be maintained and single-room cases to have open-air treatment in isolation; (5) waiting-room; (6) admission and medical officers' clinical rooms—at least two; (7) nurses' duty-room; (8) store-rooms for clothing and bedding and

¹ See "The Need of Schools of Psychiatry," by C. H. Bond, *Journal of Mental Science*, January, 1920.

² See Paragraph 74 of the Council's Interim Report.

³ See "Hospital Treatment of the Insane, etc.," by C. H. Bond, *British Medical Journal*, 1902.

boot-room; (9) staircases placed to provide alternative exit in case of emergency; (10) ablution baths, lavatories and other sanitary accessories accessible without intermingling of classes of patients; (11) liberal hydrotherapy equipment and some facilities for electro-therapy and radiant heat; with the exception of these three services, and the necessity of a certain proportion of the nursing service being fully trained in mental nursing, the remainder of the ancillary services enumerated under secondary centres would be provided from the general facilities of the hospital; (12) a small detached cottage for convalescing patients—whether a few bedrooms for nurses would require to be provided in the clinic would depend on its proximity to the hospital's nurses' home; duplication of each of these twelve items would be necessary to provide for both sexes, but the remaining six might well be arranged for the use of both sides of the clinic; (13) kitchen with larder and servery; (14) nurses' mess-room; (15) servants' mess-room; (16) a small clinical laboratory—the medical school laboratories being mainly relied upon; (17) psychological laboratory, and (18) two lecture-rooms.

This is a formidable list, but none but essentials have been included, and to erect such a structure to-day would cost, according to competent advice, not less than £800 a bed. Urgently as these clinics are wanted, what likelihood is there of such sums being forthcoming out of public funds? Except there can be aroused in some locality a strong sentiment in favour of doing something for the cause of psychological medicine, or short of another instance of princely benevolence in its behalf, obviously patience must be exercised until financial tension is relieved. The matter should, however, be constantly ventilated, and the dearth of these clinics kept well before the attention of University and local authorities; better still, if they can be persuaded to resolve to have such a clinic at the earliest practicable opportunity, and in the meantime seriously to consider plans and other arrangements, a project actually in embryo is much more likely to mature than one *in nubibus*. Acceptance of the inevitable does not, however, involve a policy of marking time. Such teaching arrangements as are feasible can be proceeded with at each University centre, and for clinical facilities reliance will have to be placed on out-patient work at the general hospital, in the organisation of which, if there is the will to do so, no delay need occur; on neurological cases, in the hospital; and for mental disorders, on the cases at the neighbouring mental hospital. This leads to the consideration of supplementary services, which will conclude what has to be said concerning institutional treatment.

(iv) *Supplementary services*.—Supplementary services, as already stated, are shown in the report as including, among others, institutions for mental defectives and hospitals for curable or incurable mental disorder. As is well known, and owing to the comparative recency of the Mental Deficiency Act and the intervention of the war, the country is not nearly so completely supplied with mental deficiency institutions as with hospitals for mental disorders; still, of the Universities in England and Wales, scarcely three can be said to be seriously deficient in a clinical field for instruction in mental deficiency.

MENTAL HOSPITALS IN ENGLAND AND WALES.

As to institutions for mental disorders, of the fifty-two counties in England and Wales, eight in Wales and only three in England are without at least one county or borough mental hospital in their area, and each of these eleven counties has acquired a share in the accommodation of a mental hospital in one of the contiguous counties. Enough has been said to indicate that, though we may be prepared to accept their inclusion in the supplementary services on the score that they receive none but mental cases, and perhaps also because they are the only hospitals where detention is combined with treatment, and while we believe that the treatment of many curable cases is destined to be always carried out at these mental hospitals, we cannot admit that the study and treatment of incipient, recent, and curable mental disorder can be permanently relegated to a supplementary position; it is imperative, and must be repeated *ad nauseam* until translated into fact as well as conceded in theory, that a recognised place be found for them in the heart of general medicine. Nevertheless, as the ninety-seven county and borough mental hospitals and, so far as practicable, the thirteen voluntarily supported hospitals, constitute the principal asset which our specialty has to offer in a comprehensive scheme of medical and allied services, some reference to them beyond their mere mention seems necessary.

How valuable are they as an asset in the partnership of medicine is all too little known by the public and ratepayers whose money has provided them, some of whom—often on the strength of statements of patients discharged but not fully recovered, or, if recovered, still retaining distorted recollections of their illness—do not scruple to make gross aspersions against all that concerns mental hospitals without ever having been within the curtilage of one. Apart from unworthy motives of advertisement, this attitude, which seems to attach itself with peculiar readiness to mental institutions, is very difficult to understand. Its cure is their closer partnership with general medicine, the avoidance as much as possible of isolation, the encouragement of unofficial lay visitors and the institution of committees of ladies, who, unconnected with the management, regularly visit the patients in their wards—such as was so successfully done at war hospitals, as well in their mental as in their general wards. In this manner would grow up a solid mass of well-informed opinion, against which malevolent allegations would be found too powerless to make their publication worth while. Differing as they do in age from over a century to one in course of equipment, they vary widely in facilities. But, were it needed, irrefragable proof of their general excellence is always forthcoming in the fact that twenty-three of them, including the oldest in construction, were utilised as

war hospitals during the Great War, mostly for general medical and surgical services, and proved so satisfactory, that not only did one-sixth of our sick and wounded from all fronts pass through them, but it was common knowledge that the military authorities—and we are glad to have with us to-day the Directors-General of the Medical Departments of the Army and Navy—ever seeking further accommodation, expressed a preference for our mental hospitals as well on account of their design as of the completeness of the organisation handed over with them.¹

The ability to make such a generally satisfactory statement should not, however, blind us to any defects or deficiencies either in their internal arrangements or in the treatment they provide, nor should the fact that the making good of some of these imperfections has to be postponed lead us to refrain from keeping them well under the notice of the public, empty though its purse may be.

INSTITUTIONS FOR MENTAL DISORDERS MUST BE HOSPITALS IN FACT AS WELL
AS IN NAME.

It is but comparatively recently that the term "mental hospital" has largely replaced that of "asylum," and the rapidity of its unofficial adoption, despite the proverbial relationship between a rose, its name and its smell, is not without significance, for nowadays we all know something of "conditioned reflexes," and are more inclined to admit the magic and even superstition of a name; hence the ready acceptance of this change, which was both timely and in the right direction, though as to the necessity or wisdom of the inclusion of the word "mental," there may be room for doubt. This change of designation, however desirable it may have been, should at least carry with it the determination that those institutions shall be hospitals in fact as well as in name, and therefore it is hoped apology is not needed for laying some stress on the following matters.

(i) *Importance of classification of patients.*—Classification of the patients is of fundamental importance; and if there is one lesson from the experience gained in mental wards of war hospitals which stands out more than another, it is the potency of the atmosphere of hope which is created by the witness of recovery in others, and by an attitude of "why" rather than "what" on the part of the physician—by an endeavour, that is, on his part to understand the mechanism of the patient's conduct rather than resting satisfied with labelling it. This atmosphere can only be attained by adequate separation of recent from chronic cases, and the prevention, for instance, of an observant patient taking alarm, and voicing it, as has been done to me, at learning that his *vis-à-vis* has been twenty years in the institution; moreover, such

¹ See "*History of the Asylum War Hospitals in England and Wales: Report to the Secretary of State for the Home Department*," by Sir Marriott Cooke and C. H. Bond, May, 1920.

separation affords the best means of focalising skilled treatment on these cases. But their classification has to be carried still further—(a) so as to provide a small unit as a half-way home for convalescing patients, who should be moved there—even contrary to their desire—at the earliest safe date, in order to get them away from sight and hearing of the morbid mental symptoms inseparable from the admission unit; and (b) so as to ensure adequate sub-classification and real mental nursing while in the admission hospital. Obviously a large ward of simple design and capable of being supervised by a minimum of staff cannot possibly ensure these ends, nor can parsimony in staff and a mere sufficiency to secure safety be justified by any considerations of economy when dealing with presumably recoverable cases.

(ii) *Unnecessary institutional customs should be avoided.*—Avoidance of any unnecessary enforcement of institutional customs upon patients likely to be discharged after a few months' treatment may also play a part in begetting an atmosphere of recovery. Particularly in my thoughts is the dislike not a few patients feel, especially if it is their first admission to hospital, at having to doff every article of their own clothing—which, moreover, is usually at once sent away—and at having to don the institution's garments. In many cases, but far from in all, this substitution is unavoidable; but even so, their own clothing might, whenever possible, be retained at least for a limited period and for use during convalescence. This more benign course is in practice at a few mental hospitals, and might well be extended. In this connection we recognise the truth in the proverb that "meat and cloth make the man," and it leads me to say a few words upon the important matter of our patients' food.

(iii) *Dietary.*—Suitability of dietary has, as we all know, both a psychological and a nutritional import, and the two aspects have a mutual reaction. The former was vividly pointed out in the paper¹ read to us in February, 1919, by the Professor of Physiological Chemistry in the University of Glasgow, and there is undoubtedly a *spes cenatica*, which has its influence in building up the desired atmosphere of hope. Monotony, absence of relish, and a standard distinctly inferior to that which patients have been accustomed to in their own homes are, when they obtain, serious blemishes. Manifestly, a careful classification of the patients enables the cost of their remedy to be thoroughly justified, whereas, if corresponding advantages are distributed indiscriminately over the many chronic cases unable to appreciate them, the administration is open to a charge of extravagance. Upon the nutritional aspect of the dietary, in the face of the bitter lessons of the war, it is unnecessary to dwell other than perhaps to emphasise the great importance to medical

¹ "Psychic Secretion: The Influence of the Environment," by Lt.-Col. E. P. Cathcart, *Journal of Mental Science*, July, 1919, p. 180.

administrators, who have to advise lay Committees upon this matter, of a competent knowledge of the facts set out in the Report¹ of the Medical Research Committee on the present state of knowledge concerning accessory food factors. Deference to these vitamins must not let us lose sight of the importance of other food values, but a careful perusal of this report shows how fatally easy it is—in these days of margarine, tinned foods, shortage of fats, sometimes an absence of uncooked fruit and green-stuff, and in some places the practice of using skimmed milk in the preparation of food—to arrange a dietary sufficient in bulk and otherwise apparently satisfactory, but which by being deficient in these accessory factors may expose the patients to the risks of lowered resisting power.

(iv) *Freedom of discharge*.—Freedom of discharge may sound a strange point to raise when we know that, besides the many patients discharged as recovered, who number rather more than 33 *per cent.* of the yearly admissions, there are at least a further 6 *per cent.* who are discharged as relieved—mostly to care of friends. But the fact remains that a private patient, apart from authority vested in Commissioners and Visiting Committees, can in general be discharged by order of the person making the payments or by the next-of-kin, whereas no such power remains with the relatives of an ordinary (so-called pauper) patient. This is probably the cause of a not uncommon expression of opinion that it is easier to get into than out of an asylum; this notion without doubt is a deterrent to institutional treatment being sought early, and if possible should be dispelled. The only real grounds for it are the refusals made solely in the patient's interests to application for discharge, generally on the score either of inadequacy of supervision at home or of its jeopardising chance of recovery. If the latter is likely to be seriously endangered and there is a fair chance of its occurring by a few months' more treatment, the refusal is certainly justified; but there are cases—at least so it has seemed to me—in which while after prolonged treatment recovery seems unlikely, the patient's discharge has been refused on the ground (probably perfectly true) that he cannot be successfully managed at home, and in which, if danger to self or public is not feared, the discharge of the patient, though against his best interests, would have been the wiser course, as being likely to promote public satisfaction and the general good of psychological medicine. The wasted trouble and expense, including that of recertification which is deemed likely to be speedily necessary, have been cited as difficulties, but this is quickly counterbalanced by the patient's being no longer maintained at public cost, and, if there are graver doubts as to his fitness, there is always at hand the method of first allowing him out on trial.² In this connection, though not quite on all fours with

¹ *Special Report Series, No. 38, published 1919, obtainable from H.M. Stationery Office, price 4s.*

² *Under Section 55 (1) of the Lunacy Act of 1890.*

it, the experience gained at the Norfolk County Mental Hospital in the course of its temporary conversion into a war hospital is well worth keeping in mind. There, instead of, as in normal times, awaiting and closely scrutinising application by the friends on behalf of unrecovered harmless patients, the friends of such cases were approached in writing and requested to receive them; in all some fifty cases were successfully so discharged,¹ and that, too, without the inducement of pecuniary assistance—not more than three of them being known, after a considerable interval, to have relapsed. A few others were somewhat similarly provided for by giving them the pecuniary help available under the Lunacy Acts; this, as you know, can be granted either when the patient is out on trial,² or while boarded³ out under the charge of a relative or friend who must have made definite application to be allowed to have the patient; the term “friend” has to be here construed literally, and may not be merely someone selected for the purpose. It is to be observed that this English system of boarding-out differs from that used in Scotland, in that the Reception Order remains in force and requires to be renewed at the statutory intervals. The difficulty of this requirement doubtless partly explains why so little advantage has been taken of the system in this country; but, if it would decrease the burden of institutional care as a cost upon the public, it might be worth while considering whether these difficulties would not be found to have now largely disappeared by the extended use of the motor car. We certainly owe a duty to do all that is legitimate to decrease these burdens.

(v) *Clinical records and facilities for clinical work.*—Clinical records and facilities for good clinical work possess an importance as respects both treatment and scientific progress which needs only mention to receive acceptance. The matter is only raised here to reiterate a conviction that, although an adequate and complete physical examination can perhaps be made of a patient while in bed in a dormitory and with sufficient privacy by the use of screens, no satisfactory mental examination can be made, nor can therapeutic conversation be effectively employed, in the absence of a suitably placed clinical room, which, if properly equipped—and this involves but trifling expense—also greatly adds to the convenience both of the physical examination and of note-taking. My own experience of their value is such that, in my opinion, no mental ward should be without one, two being probably required in each admission hospital if the institution is a large one; with respect to position, direct access to them should be possible for patients in bed without their having to traverse a day-room. As to note-taking, so often the bugbear of the medical officer, to be of any real value it must

¹ Under Sections 77 and 79 of the Lunacy Act of 1890.

² Under Section 55 (2) of the Lunacy Act of 1890.

³ Under Section 57 of the Lunacy Act of 1890.

be done *vis-à-vis* the patient, and, if suitable facilities exist for so doing under a well-considered scheme of clinical records, no irksomeness is felt by one interested in his work. By those of us who have had the experience of doing their clinical work both with and without these great advantages, no little surprise is felt that they are not instituted in all instead of in the minority of our mental hospitals.

Hitherto, in those hospitals where such a scheme obtains, it has involved clerical assistance to get the notes copied¹ into the case-books ; but now that these are so often on a loose-leaf system, the whole question of clerical records seems ripe for reconsideration, and if the difficulties with which we are all familiar can be overcome, a big step will have been taken towards the amassing of clinical material of real service to an investigator endowed with a synthetical mind.

MEDICAL STAFFS OF MENTAL HOSPITALS.

The medical staff of mental hospitals has rightly been the subject of much recent attention both in circulars issued by the Board of Control² and on the part of this Association, as well as in medical and other papers. The points on which stress has been laid have been the pressing necessity of better social conditions for assistant medical officers, the provision of houses for those who are married, improvement in facilities (including study-leave) for training in their specialty, and a recognition that treatment of mental disorders requires the expenditure of much time at the hands of well-trained and highly-skilled physicians, and therefore that some increase in the number of medical officers is called for. The general acceptance and sympathy with which these proposals have met is gratifying so far as it goes ; but, taking the country as a whole, disappointingly little has been done in the matter, and it is indeed time that words should be translated into action. Passing from those points, there are three other subjects relating to the medical staff, consideration of which, it seems to me, might lead to much advantage, namely, the institution of a visiting staff, the better organisation of the resident staff, and their position in the public service.

(1) *Institution of visiting medical staffs.*—The institution of a visiting medical staff at mental hospitals is no new idea ; in fact, it was much more common many years ago than now, but probably owing to the light in which it was regarded and utilised it seems to have out-

¹ This system of note-taking *vis-à-vis* the patient and in which the medical officer's clerical work is completed in the wards, save for his subsequently initialling the entries in the case-books, owes its inception to Dr T. E. Knowles Stansfield at the Banstead Mental Hospital whence it was later elaborated under him at Bexley. Conjoined with arrangements whereby only a small number of notes fall due daily, the system is productive of clinical records of high standard.

² See Board of Control's circular of March, 1920.

grown its popularity. It is more than ever my view¹ that the resident staff at a mental hospital, especially its senior members, should be regarded as—and should, in fact, be—mental experts, and that as such, whilst their skill as specialists should doubtless have been founded on a sound general professional knowledge, they should not be expected to profess either the experience of a consultant in general medicine or, and still less, expert competency in operative surgery and in other special branches. In cases of emergency, especially where a major operation may prove necessary, they have always been authorised to call in expert assistance; but it is in relation to the routine work of the hospital that the demands of modern medicine need a visiting staff, on which should be included a general physician, an operating surgeon, radiologist, and a dental surgeon, and, in the larger institutions, representatives of the other special branches usually comprised in the visiting staff of a large general hospital. Their visits should be regular and not merely as consultants on summons, and before one or more of them should be brought, for mutual consultation with the resident staff, all cases presenting some condition upon which the latter feel a further opinion would be helpful, and at least the majority of all newly-admitted patients. Some insistence upon mutual consultation seems necessary to combat the much less desirable practice of merely asking for a report. The newspapers have done good service, while voicing medical opinion, in awakening a “dental conscience,” and the number of mental hospitals in which this matter is receiving proper attention is rapidly growing, but this should only be regarded as a small beginning towards the institution of a full visiting staff. The cost involved is small; for instance, at the Graylingwell Mental Hospital, where the visiting staff are four in number, the total cost—among other interesting particulars kindly supplied me by Dr. Kidd—is about equal to that of one junior medical officer. It needs but little imagination to visualise the many advantages which would accrue to individual patients, to the members of both resident and visiting staffs, to our specialty in general and to medicine as a whole, were such a scheme of medical services in vogue at all our mental hospitals and at all the larger institutions for mental defectives.

(2) *Organisation of the resident medical staff.*—The organisation of the resident staff, as implied here, includes topics not easy to ventilate on an occasion such as this—some which can best be dealt with in committee. It must suffice to say that the creation of a mental hospital medical service, which is sometimes adumbrated as a remedy for a certain amount of dissatisfaction that is occasionally voiced, is probably not only impracticable but unnecessary in order to obtain

¹ See “*The Need for Schools of Psychiatry*,” *Journal of Mental Science*, January, 1920, p. 12.

the advantages claimed for it. Independent local action on the lines suggested by the Board of Control in their circular of March last year can, and probably will, effect a good deal; but much more might be possible by concerted action by Visiting Committees. Their use of the word "hospital" in connection with their institutions marks the presence in their minds of aims and principles which, were they extended to the terms by which their medical posts are designated, would certainly give satisfaction to many of the holders of those posts; thus, though the term "medical officer" is statutorily restricted to the medical superintendent and necessitates the use of the word "assistant" to all the others, no matter how great their experience, there is nothing to prevent, if so desired, the employment of the hospital term "physician" in its various grades from "house-physician" to "physician-in-chief," adding to the latter and to the post immediately below it the respective administrative terms "superintendent" and "deputy-superintendent." It ought not then to be difficult to arrive at common agreement what salary each of the medical ranks should carry, leaving the sum payable as "charge pay" to the superintendent and his deputy variable locally according to circumstances, such as size of the institution; upon the latter circumstance and the nature of the work undertaken would depend which of the medical ranks would be included in the staff and the number of their holders. In arranging their work it seems very desirable that the individual treatment of recent cases and of others in need of really skilled mental treatment should be entrusted to only those on the staff who have this skill, and, as this work occupies much time, the junior members should relieve them of duties which interrupt such treatment. Subject to the necessarily paramount position (medical and administrative) of the chief physician and superintendent, as large a share as practicable of actual responsibility should be accorded the senior members, and a sense of this would be promoted were they expected to submit an annual report of their clinical work to the superintendent. In the making of these appointments, especially the chief ones, professional satisfaction would be promoted were the advice of those who can act as medical assessors more often sought; and, where the institution is in the vicinity of a University, means might with advantage be found for giving the latter a voice in certain of the appointments—in illustration of which mention may be made of the new rules under which the Physician-Superintendent at the Royal Edinburgh Asylum is appointed and holds the Chair of Psychiatry in the University, of the recent appointment to the Chair of Public Health at the Sheffield University in accordance with their declared policy of associating the public health work of the city with instruction given at the University,

and of the Chair in Psychiatry at the University of Sydney, which in future will be filled under arrangements¹ jointly made between the Government Department of Lunacy and the University Senate.

(3) *Position of the resident medical staff in the public service, and the necessity of "fluidity" of service.*—The position of the resident staff in the public service is by far the most important of these three subjects relating to medical staff. It is the key to any chance of progress on the lines of my theme ; but as at present regulated, it is, in my opinion, far from satisfactory, and might be placed with much advantage on a broader footing. The medical officers of mental hospitals are whole-time officials—which is as it should be—whose work, under the rules of their service, is rigidly restricted to the duties of their institutional post.² Doubtless, should the Visiting Committees of mental hospitals ultimately become members of a county or borough health committee, the mental health of the area will be considered as a whole, and responsibility for it will not be limited to the maintenance of the mental hospital. But there is no need to wait for that consummation, and, as has been one of my objects to show, there is a field of work whose harvesting is much overdue. In the large cities possibly other men can be found for this work, and it is certainly not my suggestion that anyone capable of doing it and able to give the time should be ruled out. There is room for all such ; but in most areas, and probably for many years to come, reliance will have to be placed upon the medical staff of the mental hospitals and institutions for defectives. The principle, it is therefore my desire to emphasise and urge strongly, is that these officers should be regarded as public officials, whose services as specialists, notwithstanding they hold resident institutional posts, should be freely available at all centres in their locality at which either mental treatment or the diagnosis of mental conditions is required as part of the public's medical and allied services. This fluidity of service—if one may so term it—would enable much preventive and early treatment, now neglected, to be performed ; nor would that be at the expense of institutional duties : on the contrary, the constant touch kept with the periphery, the witness of the operation of predisposing factors, and the acquirement of better knowledge of premonitory symptoms and early stages of mental disorders would broaden the observer's outlook, and without doubt much enhance his effectiveness within his institution.

¹ See *British Medical Journal*, May 7th, 1921, p. 684.

² Subject to the superintendent being allowed to visit, at request of a Secretary of State, any prisoner charged with a capital offence, and executing at request of the Commissioners a Lord Chancellor's Order to visit and report upon a case. At a few institutions he is allowed, when called in as a consultant, to see persons suffering from mental disorder within the area. He is sometimes consultant to the local authority under the Mental Deficiency Act, and in one instance the rules provide for his performing certain duties within the neighbouring University.

PURPOSES FOR WHICH FLUIDITY OF SERVICE IS REQUIRED.

It is, however, not alone for routine therapeutic work at clinics and at out-patient departments of general and municipal hospitals that this fluidity of service is needed, and, in bringing my remarks to a close, it is my wish to touch on four relationships which psychological medicine can claim, and to urge that there are steps our Association can take to establish them on a firm footing. These four are its relation to medical services for school children, to criminology, to industrial hygiene, and to the naval and military medical services. In the absence of more than a smattering of personal experience of these matters my observations will be brief; but deficiency on my part will, as regards two of them, be amply met by the papers¹ we are promised to-morrow from Dr. Auden and Dr. Myers.

(1) *Psychological medicine and the school medical service.*—The medical services required for children at school are numerous, and we are only indirectly concerned with the question as to the extent to which they can or should be undertaken by the general practitioners of the families to which the children belong; though, if consulted on the mental condition of a child, we should doubtless feel more dependence on the wider and more useful facts obtainable from the doctor, who has intimate knowledge of all the members of the family, than is possible from one who knows the child only in school. But to whatever extent examination and treatment of school children ultimately devolve on general practitioners, the recognition (*a*) that social efficiency is the goal; (*b*) that though failure in its attainment may have a purely physical basis, there are educational and sociological problems which need a special training in psychological medicine, particularly in educational psychology; and (*c*) that psychoses and psychoneuroses developing in adult life are not infrequently traceable to childhood's experiences and buried difficulties which were inadequately dealt with in childhood, are all circumstances which dictate the necessity of a school medical officer possessed of special training and much skill. In populous and important centres this already obtains; but, so far as one is justified in speaking with only outside knowledge, neither his nor any other mental expert's services are available as a matter of routine in many country districts. Here, again, fluidity of service of public officials seems highly desirable. The medical staff of the public mental hospitals might well, under a recognised scheme, be available for the school service; and correspondingly, where the school medical officer undertakes psychological work, part of his time might with equal advantage not merely be available on summons, but be definitely assigned for visiting duty at the mental institutions; the former would thus maintain his touch with early conditions, and the

¹ "Mental Defect and the School Medical Service," by George A. Auden, and "Psychological Medicine in Relation to Industry," by C. S. Myers.

latter would see acute and terminal phases from an angle that might possibly suggest preventive measures, and both of them would have the chance of considering not only types in groups, but also of learning many a lesson by watching changes of phase in cases known to them from early school age. In passing from school service topics, it seems opportune to ask whether the routine examination of school children has not been inaugurated long enough now to enable the medical staff of institutions for both mental disorder and deficiency to be furnished, under some mutually convenient procedure, with a report of the school years of the younger of the patients admitted—in course of time it will, of course, be available for all. I can call to mind many a case in the treatment of which such information would have been of material assistance to myself and colleagues.

(2) *Psychological medicine and criminology*.—Criminology has just received a contribution of fascinating interest and of far-reaching importance, and any words from me can only fall very flat when you read *The English Prison System*, by Sir Evelyn Ruggles-Brise, printed for private circulation at H.M. Convict Prison at Maidstone, and the significance of which was duly recognised by the digest and leading article which appeared in the *Times* a fortnight ago. By the courtesy of its author and of the Governor and Medical Officer of H.M. Convict Prison at Birmingham, a full opportunity was given me a few months ago of seeing the highly important psychological work that is being conducted there and at the Courts of that city; and, but for the fact that the Assizes are being held there this week, we should have been favoured with a personal account of it from Dr. Hamblin Smith. There is available, however, his and Dr. Pott's report,¹ presented last October to the Justices of the City of Birmingham, from which most interesting details can be learnt. It is certain that a great unity of thought in legal and medical minds is taking place as to the relation between punishment and treatment, and that, while recognising that when a criminal act has been committed the last word must remain with the Crown, it is yet possible to abandon a "legal tariff" for crime and give medical science an opportunity of exerting both its reclamatory and preventive influence, and this, too, without the introduction of any mawkish sentimentality. At present it seems that it is only selected cases that are referred for medical opinion and advice, but it is to be hoped that the time will come when it will be possible to arrange for a much more routine and extended application of these methods, especially as regards first offenders. A suggestion has been put forward that this application shall be concentrated at a few

¹ Obtainable from the Clerk to the Justices, Victoria Courts, Birmingham; see also "The Mentally Defective and Unstable brought before the Courts," by W. A. Potts, *British Medical Journal*, April 3rd, 1920, p. 472.

centres. Conscious of one's own ignorance of these matters one hesitates to criticise ; but it does seem to me that concentration, though it may possess distinct advantages, cannot satisfactorily meet the case when the movement spreads, as it undoubtedly will. Only quite lately one of the newly-appointed women Justices asked me whence and how it would be possible to obtain expert medical opinion upon the many cases brought before her, which she sees clearly enough are problems incapable of solution by a sentence of punishment. Within walking distance of her court are two mental hospitals with some seven or eight medical men, each of whom would be capable of rendering most valuable assistance. Is there not here, again, a distinct call for fluidity of service ; and, where prison and mental hospital are not inconveniently far apart, would not by mutual arrangement the services of the prison medical officer, who is an expert in criminal psychology, be of corresponding assistance in not a few of the cases that find their way into mental hospitals ?

So important has become the relationship between psychological medicine and the work of both the school and the prison medical officer that there is a doubt in my mind whether our Association is taking as useful and active a share in these matters as it might. We are fortunate in having among our members several distinguished representatives of these services ; we would like to enrol them all, but there is a limit to the number of societies which we can be individually expected to join. Could not this difficulty be met, and with the certainty that advantageous results would emerge, by the setting up of standing joint committees, whose duty it would be to keep this Association and the other respective societies adequately informed upon matters in which we can mutually assist one another ?

(3) *Psychological medicine and industrial hygiene*.—Industrial hygiene, in two words, embodies principles which must inevitably affect the health, wealth and happiness, and therefore the status, of any country that either practises or neglects them. It may without doubt be claimed as the offspring of the great factory and other analogous reforms in which this country led the way ; but, as now understood, it owes its impetus to activities which until recently have taken place chiefly in the United States, where the value of studies in occupational diseases seems to have been more adequately recognised than anywhere else. But fortunately it has now taken firm root in our own country—the result mainly of the initial work of the Health of Munition Workers Committee, which was continued in the Welfare and Health Section of the Ministry of Munitions, and subsequently developed by the Industrial Fatigue Research Board, constituted in 1918.¹ Industrial clinics are

¹ *Their First Annual Report*, obtainable from H.M. Stationery Office, was published in 1920.

springing up in various centres at the instance of several of the larger industrial companies, and it is being realised that, apart from the duty owed to the person employed of protecting and curing him of maladies engendered by his work, medical science, besides sometimes providing what is necessary when the wheels of the industrial machine are creaking, can when consistently employed serve the still greater function of preventing friction, thereby promoting harmonious working in the human machinery. In this work—and not alone in connection with industrial fatigue¹ and the nervous and mental disorders to which it gives origin, but also in the recognition of industrial misfits and the adjustment of minor disputes—psychological medicine is already playing an important part. Whether fluidity of service can be of assistance here is obviously very doubtful: probably not. But once assured of the practical value of this or that branch of medical science, industry can be trusted to find her own means to secure its application.

(4) *Psychological medicine in the naval and military medical Services.*—The naval and military medical services can, with some truth, be said to provide our Association with a new sphere of interest. Prior to the war the principal provision in them for mental cases was confined to the Royal Naval Hospital at Great Yarmouth and a block for some 100 beds annexed to the Royal Victoria Hospital, Netley, and, except to a minor extent in the Army, in neither service was psychological medicine included as a branch of medicine in which officers could be officially recognised as specialists. Since the relinquishment by the naval and military authorities of the war hospitals lent to meet the increased demands of both services for additional accommodation for the treatment of nervous and mental cases, those two hospitals, I believe, still retain the two principal units for mental treatment. But the amount of work in this line required during the war—in which so many members of this Association took an active share—the problems it opened up, and other problems of recruiting and training in which it was found help could be obtained from psychological medicine, have established relations between our specialty and the Services which are likely to be permanent. It is of no small interest to us to know that mental diseases is now one of the twelve subjects in which an officer in the Army, not above the rank of lieutenant-colonel, may be granted additional pay (at the rate of 2s. 6d. daily) while acting as specialist in a post considered to merit the grant. There does not appear to be any system of occasional study-leave, but all medical officers are required to come up to the Department's College in London for twelve months: half of this period is devoted to general medicine and surgery and the other half to the

¹ See "*Industrial Fatigue*," by C. S. Myers, *British Medical Journal*, January 22nd, 1921, p. 205.

study of such special branch as the officer may select. In the Naval Medical Service five months' study-leave is given on full-pay for promotion to surgeon-commander after eight years' service, periods of three months to senior medical officers as opportunity occurs, and surgeon-lieutenant commanders may be given study-leave in addition to that for promotion. Naval officers may be appointed as specialists up to and including the rank of surgeon-commander; their number is limited to forty-six, and each receives additional pay at the rate of 2*s.* 6*d.* daily during the period of his appointment. Officers can choose the subject in which they wish to specialise. The number of subjects is seven, but up to the present psychological medicine has not been included—an absence we shall all hope is only temporary, for there are good grounds for believing it is not for lack of interest in the subject. No officer in either service is at the moment in possession of a Diploma in psychological medicine, but about four naval officers hold the Certificate of this Association. It does not appear that either service has as yet contemplated the possession of one of the diplomas in psychological medicine (which are granted by six of the Universities and the Conjoint Board in London) as a *sine quâ non* to recognition as a specialist in this subject. Should such a rule be ultimately adopted, it is manifest that the Army's existing arrangements would easily lend themselves to the requirements of at least three of these diplomas, but in the case of the Navy, while it seems that an officer could reasonably easily obtain sufficient study-leave (three months) to enable him to proceed to Part I of the examination, he would have either to defer Part II until another period of study-leave was due to him or to obtain a further three months' special leave, possibly on half-pay. It is apparent, too, that the exigencies of the Naval service may make it difficult for officers to find the necessary clinical opportunities required for these diplomas; but in their favour is the fact that, within comparatively easy distance of six of the nine naval ports in Great Britain and Ireland at which there are naval hospitals, there is a public mental hospital within easy distance, at which doubtless arrangements could easily be made for them to visit and receive clinical instruction. It is not unlikely that our Association in the course of their negotiations with the bodies granting these diplomas might, if desired, be of some assistance in furthering any such movement in the services, more particularly so now that the scope of several of the diplomas has been widened to permit of candidates, whose opportunities in certain of the clinical subjects are small, to show special knowledge in their particular field of work.

HEALTH VISITORS.

Passing allusion has already been made to these important workers—the “Mercuries” of our profession—but it would be a matter of self-

reproach were the brevity of their mention regarded as an index of the utility, as felt by me, of their work. As ancillary to the every-day work of an organised service for the treatment of mental disorders and mental deficiency, and to at least the first two of the four relationships for which establishment has just been pleaded, the value of what can be done by these workers seems insufficiently recognised in their country. They are at present represented, as respects psychological medicine, in connection with the work of the Mental After-care Association, with that of the Central Association for the Care of the Mentally Defective, and with several similar local associations, some of which are affiliated with the Central Association. They should be recognised as indispensable throughout the whole of the scheme of work which it has been my endeavour to outline, and our public mental institutions could do much in promoting arrangements for their requisite training. Multiplicity of visits by this and that health visitor is a mistake and is naturally apt to cause annoyance, but it can be obviated by adequate organisation and sufficiently comprehensive training of each visitor.

CONCLUSION.

But for the obvious utility of specific reference to and falling in line with the Consultative Council's scheme, my address might perhaps better have taken "Mental Hygiene" as its title; for, indeed, such suggestions as it contains have as their ultimate goal the promotion and preservation of mental health. Even should all these proposals mature, pruned and added to as none better than the Medico-Psychological Association is capable of doing, all the work requisite for that preservation will not have been overtaken. It is therefore of good augury that an idea is afloat to establish in this country a National Committee for Mental Hygiene on the lines of that body of men and women who, under that name, have been for the past thirteen years doing such magnificent work in the United States, and out of whose example similar committees have sprung up in the Dominion of Canada and are contemplated elsewhere in the Dominions, and also, as Dr. Henri Colin of Paris will explain to us,¹ in France.

In concluding these remarks and thanking you for your attention, let me say that no pretence can be made of any of that self-satisfaction which is legitimate in using an opportunity such as this to best advantage. What I have been able to offer you has been put together amidst the exacting pressure of much official work, and consequently my theme, which is undeniably of great importance to all in our sphere of work and deserves leisure to express it in balanced form, may have sometimes seemed to have disappeared beneath its mass of side issue.

May I add that, if here and there some remark has been pitched in

¹ *In his paper on "Mental Hygiene and Prophylaxy."*

an *ex cathedrâ* or oracular tone, nothing has been further from my desire, which has merely been to offer suggestions. We are all of us engaged in work that embraces some of medicine's greatest difficulties, "things that do almost mock the grasp of thought," and we each owe a duty, when occasion offers, to contribute his share of thought to them. In particular, and in again tendering my thanks for the honourable position in which you have placed me, let me ask you not to read into my remarks any official authority for their utterance. It is the first occasion that a member of the Board to which I have the honour to belong has, while a Commissioner, occupied this chair; and it is my earnest desire that, during my presidential year, nothing I shall say or do may mar the privilege of holding this dual position.

The Problem of the Feeble-minded in South Africa.⁽¹⁾ By J. T. DUNSTON, M.D., B.S.Lond., Commissioner in Mental Disorders for the Union of South Africa.

MR. PRESIDENT AND GENTLEMEN,—To make more clear to you the general position in South Africa as it affects the subject of mental disorders and defects, I propose, if you will allow me, to begin my paper by referring briefly to matters outside its scope as indicated by the title.

Before the Union of the Colonies we had a most excellent Act in force in Cape Colony, passed in 1897. It was taken over practically in its entirety by the Governments of the Transvaal and Free State in 1902 or thereabouts.

When the Union took place in 1910, the enactments in force in each Colony, which had now become a Province in the Union, continued to operate; the need for a consolidating law soon became very apparent, to secure uniformity of procedure, to facilitate the transfer of patients from one institution to another, and to bring all the laws into line with modern legislation, particularly with regard to the care and treatment of the feeble-minded.

There were other urgent needs, the most important of which was the necessity for more accommodation for patients. For many years previous to the Union very little additional accommodation had been provided in Cape Colony. Indeed, it was only in the Transvaal and the Free State that there were beds to spare, but after the Union these were almost immediately filled up by the transfer of patients from the other Provinces. Thus the position became really serious, and patients urgently needing mental hospital treatment were kept in gaols and other unsuitable places for lengthy periods until hospital beds could be allotted to them.

(1) A paper read at the Annual Meeting held in London, July 15th, 1921.

The Government fully realised the difficulties of the position, and in April, 1913, appointed a select Committee of the House of Assembly to inquire into the question and make recommendations. That Committee reported in May, 1913; their report was the most important that had ever been made in South Africa upon this subject and gave us a fresh start, not only in providing accommodation for mentally afflicted patients, but also in further developing a healthy and keen public interest. Besides recommending that funds should be provided to relieve the existing congestion, as well as to secure a reasonable margin for future requirements, and further suggesting how this accommodation should be distributed, that Committee made certain important general recommendations. For instance, that at every mental hospital there should be an admission ward where recoverable cases could be treated without the necessity of their being admitted into the ordinary wards of the institution; that there should be wards set apart in general hospitals where early and acute cases could be detained for observation and treatment, so avoiding the necessity for sending such patients to a mental hospital at all, if found recoverable; that an Act for the Union be passed as early as possible which should provide for the appointment of a Commissioner in Mental Disorders and local mental hospital boards; that from that Act any terms calculated to offend the susceptibilities of persons requiring treatment in mental hospitals should be left out, and that the placing of patients within the precincts of prisons or charge offices should not be allowed when such a course could by any possibility be avoided. All the recommendations of the Committee were accepted by the Government.

In 1916 the Mental Disorders Act was passed, which realised to the full the wishes of the Committee. I think it would be interesting to this Association to draw attention to certain portions of that Act.

Sections 27 and 28 give magistrates, judges and courts power to commit for observation to a mental hospital any person who, while awaiting trial, on arraignment, or during trial, shows signs of mental derangement. These sections have been coming more and more into general use, and I do not hesitate to say have very much improved the character of the medical evidence given in such cases, and have materially helped the courts and juries when called upon to decide whether or not an accused person be fit to plead, or would be better dealt with by care and treatment in a mental hospital or otherwise.

Chapter 7 of the Act provides for the treatment of incipient cases of mental disorder in general hospitals, but has not been used. Quite a number of cases have been treated in general hospitals, but without recourse to the provisions of this chapter, the real difficulty in the use of which has been financial stringency, caused by the war, which has prevented the authorities raising the requisite funds for the building of

special wards in the general hospitals. I believe and hope that this unfortunate state of affairs is about to be remedied, at least in Johannesburg, and plans are already being discussed for special wards to be erected at that centre, and a site has been selected for the building.

Another section, which I feel sure will interest you, is section 76, which provides that no person who does any act in pursuance of this Act has any liability in respect thereof if that act be done in good faith, and further if the court be satisfied that there is no ground for alleging want of good faith, or that the proceedings are frivolous or vexatious, the action may be stayed. I do not know whether your experience has been the same as mine, but no single action has been brought in South Africa by a patient as far as I know, except by one who has not wholly recovered.

As I mentioned before, some legislative provision for the care of the feeble-minded was regarded as one of the most important reasons for passing a consolidated Act as soon as possible. As early as the year 1908 a society for the care of the feeble-minded was established in Cape Town, and was doing such propaganda work that public opinion throughout the country was being stirred to understand the importance sociologically of the care of the feeble-minded. The Child Welfare Societies also took a great interest in the question, as the various committees centred throughout the country discovered the important bearing feeble-mindedness had on their work. The Child Life Protection Society in Cape Town established a clinic in their offices at which cases could be seen and advice given as to their care and treatment. I took these clinics at first, on my various visits to Cape Town, but they are now regularly taken by one of the officers of the medical staff of the Valkenburg Mental Hospital. As a result of the various forces at work, it was felt and finally decided that mental hygiene societies should be established. In most centres this work was undertaken by a special committee of the Child Welfare Society, to prevent the multiplication of societies. By the election of certain delegates from these societies and the addition of certain Government nominees, a "National Council for Mental Hygiene and the Care of the Feeble-minded for the Union" was established last year, and its funds are being augmented by a Government grant. Great benefit has already resulted from the work of the Council and the societies and their sphere of usefulness is steadily expanding, so that the time is near when we shall be able to use their inspectors and the visiting members of the committees to do field work for the mental hospitals and homes for the feeble-minded.

In recent years in various departments, such as the Department of Prisons, the Department of Education and others, the officers concerned have more fully realised how much their work was interfered with by the presence of feeble-minded persons in their institutions.

Representations were made by the heads of these departments to Ministers, and a Departmental Committee was appointed by the Minister for Education to suggest a solution and propose a uniform procedure. The Committee met several times and finally recommended—

That the Prisons Department should be responsible for the children falling under the Reformatories Act, 1911, and the Union Education Department for the children falling under the Children's Protection Act, 1913, and the provincial authorities for the rest of the children of school age. (The provincial authorities are responsible for primary education in South Africa.)

That all children in reformatories and industrial schools should be regularly inspected by a mental specialist with a view to determine what children are mentally defective and require special care, treatment and control.

That the children in such institutions should be classified as (*a*) normal, (*b*) backward and border-line, (*c*) feeble-minded, (*d*) moral imbecile and feeble-minded, with unpleasant traits of character or conduct, and (*e*) idiots and imbeciles.

That idiots, imbeciles and moral imbeciles and feeble-minded with unpleasant traits of character or conduct should be certified under the Mental Disorders Act, 1916, and sent to Union Government Institutions or placed under suitable care elsewhere as soon as the diagnosis be made.

That the backward, border-line and well-conducted feeble-minded children should at first be dealt with together in a special part of the institution to be provided for them. In course of time the backward would make good and return to the normal classes, the defective remaining in the special part of the institution provided for them until diagnosis is established, when they would be certified under the Act, and either removed to a Union Mental Institution or placed under suitable care elsewhere.

To make the procedure uniform and co-ordinate the work in the various departments, the Commissioner for Mental Disorders should himself, or by deputy, carry out inspections of reformatories and industrial schools, and render such assistance as may be asked for in respect of schools in the provinces.

These recommendations have all been approved by the Government and inspections have been carried out for the past three years.

By no means all of the institutions have been inspected, but I am able to give you a few figures which indicate the extent of the problem. They are, unfortunately, for the year 1918, as I have not brought with me the figures for the last two years. It may be possible, before this paper goes into print, to bring them up to date, but I can tell you more or less what the later results were found to be.

In one industrial school 12 *per cent.* of the girls were feeble-minded, and there were 17 *per cent.* who were in the border area. At another industrial school for girls 12 *per cent.* were found to be defective, and including the border area 14 *per cent.* In one reformatory 25 *per cent.* of the boys were found to be mentally defective and 10 *per cent.* border area cases. In another institution for girls 10.5 *per cent.* were feeble-minded and another 16 *per cent.* border area cases. If I remember rightly, the figures since then have remained about the same, and it is pleasing to be able to report that though the investigations were made in different years by different medical officers, the results obtained in the individual cases were practically the same. The medical officer examining had not before him the result of the previous year's examination.

Work has also been done in other institutions, and in one of the Pretoria Rescue Homes 25 *per cent.* of the inmates were found to be feeble-minded. That rescue home and two others in South Africa have been licensed under the Mental Disorders Act, and each now forms a permanent refuge for such of its inmates as are diagnosed as feeble-minded. In the Pretoria institution a special house is set aside for these patients, but they are not rigidly kept to that part of the institution, being moved from time to time as seems most suitable in the treatment of the case. It is hoped that in the course of time all the rescue homes in South Africa will be licensed to maintain a certain proportion of feeble-minded girls.

I do not know whether your experience is similar to mine, but I have found that there is a stigma attaching to rescue-home girls, and so many people say "What is the good of employing these girls? They only get into trouble again!" I feel that this is largely due to the fact that the feeble-minded have not been recognised in the past, and consequently they were discharged to service or other work at the end of the year during which they could be legally detained. The normal girl who meets with misfortune generally can make good and give a good name to the home; the feeble-minded girl or moral imbecile cannot, and gets into all sorts of trouble. This had not been understood, or that she was the girl who brought discredit on the work of the institution and the normal inmates as well. It is also my experience that what has been said of these girls applies *mutatis mutandis* to those leaving reformatories and industrial schools. It is surely a matter of fundamental importance to the institutions, their inmates and to the general community, that the feeble-minded should be sorted out, notified, and kept under proper supervision and control. If discharged from the home it would only be to go to suitable guardians, who would have full knowledge of the risks to be run and the steps necessary to avoid them.

More than 10 *per cent.* of the inmates of the Barberton Gaol, which is for prisoners sentenced as habitual criminals, were found to be

seriously defective. Many of them were only medium-grade imbeciles, and yet they have been sentenced time after time and indeed passed the greater part of their lives in prison. One man whose case I will cite has been in prison thirty-eight times in the last ten years, and immediately on discharge on the last occasion had committed another obviously stupid offence. The barrister who defended him recognised his mental state and put up a plea of irresponsibility, but on the medical evidence—non-expert—the jury were not able to find him mentally disordered or defective. He was found guilty and the judge gave him the indeterminate sentence. Tested both on the Binet and on the Porteus systems his mental age was between four and five years. This unfortunate fellow could not give very much account of himself, but I think he was giving a true history when he said that he did not remember being out of gaol more than a few days since he was a boy.

I will only trouble you with one other figure, and that is in the year referred to above, out of 1,640 admissions to mental hospitals in the Union, 13·5 *per cent.* were admitted solely on account of mental defectiveness and another 8 *per cent.* on account of epilepsy. Some of the 484 admitted with dementia præcox were also suffering from congenital mental defect. I think it is perfectly fair to say that if feeble-mindedness could be eliminated, the number of persons requiring care in our mental hospitals could be very largely reduced.

As has been indicated, it is the policy of the Government in South Africa to permanently supervise the feeble-minded who drift into such institutions as prisons, reformatories and industrial schools, rescue homes and so forth, but it is clearly understood that this policy alone would only be one of locking the stable door when the horse had been stolen. It is recognised by the Government that if real and permanent good is to be done it can only be by discovering the feeble-minded at school, giving them special training, and throughout life keeping them under such type of permanent care, supervision and control as may be necessary to prevent them from getting into trouble, or becoming in any way a nuisance or danger to themselves or the community.

In September, 1918, advantage was taken by the Minister of the Interior at a conference of the administrators of the various provinces of the Union to discuss this important subject with them. The following proposals were considered :

- (1) That the Union Government should be responsible for the maintenance and care of idiots and imbeciles of school age, *i.e.*, those falling under Classes 3 and 4 of Section 3 of the Mental Disorders Act, 1916.
- (2) That the provincial authorities should be responsible for the care and training of feeble-minded children of school age, *i.e.*, those falling under Class V of the same Section of the Act.

- (3) That the Commissioner of Mentally Disordered and Defective Persons should be notified and keep a register of all children diagnosed in the schools as being feeble-minded, and that after school age the Union Government should be responsible for their care, treatment and control.

The principles were agreed to, and arrangements have already been made between the provinces of the Transvaal and Natal and the Government, and regulations drafted. In these all the recommendations made by the Departmental Committee regarding children in industrial schools were accepted in so far as they applied to school children, and further regulations made the procedure more definite. The Director of Education was made responsible for notifying the Commissioner in Mental Disorders of all defectives, whether attending schools or not. (Information regarding those not attending school could be obtained through the various school attendance officers.) The principal of the school was made responsible for drawing the attention of the school medical officers to the cases of children who were backward for more than a certain period without a reasonable cause. It was further agreed that where there was difficulty in regard to the diagnosis, members of the medical staff of the nearest mental hospital would be available for consultations.

Naturally, as soon as the defective patients began to be sorted out in all the institutions and schools as I have described, the shortage of accommodation for this class of patient became more and more serious. There were in South Africa at that time beds for the feeble-minded only in mental hospitals, in the rescue homes which had been licensed, and in a small home known as Adam's Farm, close to Cape Town.

With regard to the numbers of adult feeble-minded in South Africa, there are no figures except those already referred to, but in a very important report by Dr. C. L. Leipoldt and Dr. J. M. Moll on the schools of the Transvaal, they state that about '84 *per cent.* of the children examined were feeble-minded, which means that in the Transvaal province alone over 750 defective children were attending school. If that percentage holds good for the other provinces, the total number of defective children attending schools in the whole Union would not be less than 3,000.

Fortunately the Union Government were able to buy from the Cape Provincial Administration the Alexandra Hospital, which was opened for mentally defective patients on June 1st of this year, and accommodates 800. During the war this hospital had been used as a military hospital and afterwards workshops were built for the training of discharged soldiers. These are now no longer needed for that purpose, and have been taken over and are most suitable for the training of our feeble-minded patients in industrial pursuits. There is a good garden,

well-equipped laundry and workrooms, as well as excellent and well-built wards, so that the whole institution is well fitted for their treatment and care. This home will receive patients mostly from the Cape Province. For the northern provinces and Natal it is probable that a home will be established at Potchefstroom, where a suitable site and buildings exist for about the same number of patients. This home will be open, it is expected, within the next few months.

I feel that it is incumbent upon me to make some special remarks about the incidence of feeble-mindedness amongst the native populations of South Africa, though I am afraid I cannot say very much of importance at present. From the facts that in all these generations the natives have made no progress in any of the arts of civilisation of their own initiative, and that though they have been for the last two or three hundred years in closer and closer contact with a white civilisation their kraal life has been little influenced, it might be inferred that they are mentally an inferior race. Such an impression is further strengthened by many other facts—they are extremely childish and emotional, they lack initiative; they rarely display foresight or worry about the future. Bad years have given them poor harvests, and they have starved time after time, and yet they never seem to learn from experience to provide against such emergencies. Again, they are only orientated in time in the vaguest way, generally having no idea of how old they are and very little of the passage of time. Periods of time in their own lives are indicated by the size a particular member of the family had attained when some or other war had taken place in South Africa. They have no written language, the crudest of musical instruments, and very little idea of colour. In some native languages the same word is used to indicate green or blue.

With regard to the mental disorders found amongst the natives, I have never seen, and, so far as I know, no single case of true paranoia has been reported as occurring amongst them. It is not rare to find simple unsystematised delusion without hallucination. I have often wondered whether the fact that paranoia does not apparently exist amongst the natives is also significant of inferior mentality, and that they have not reasoning power enough to become paranoiacs.

These and many other important considerations suggest the idea that the native, even of the best tribes, probably belongs to a mentally inferior race, as the lower tribes such as the Bushman certainly do. They suggest that there is such a defect of brain cells that neither education nor environment nor any other factor except a mutation could lead to their rising to the level of advancement of the higher races. But we do not yet know for certain, and there is just as much danger in under-estimating their capacity to absorb higher civilisation as there is in over-estimating it. Time alone can show, but it is essential to

realise that there is the question, and that it is one of such fundamental importance to the future that we should rush to no rash conclusions, but carry out most careful psychological investigations. Not having been able to decide the mental status of the native, it is impossible to say anything about the higher grades of defectiveness amongst them, but the coarser forms of mental defect, idiocy and the lower grades of imbecility do not appear to be so common as they are amongst the white population. This may be explained perhaps partly from the fact that certainly in many tribes it was the custom, before the white man interfered, to destroy defectives and most of those who were suffering from chronic mental disorder. So keen were they on physical perfection that in certain tribes if a woman gave birth to twins, both the mother and children were destroyed, as they apparently thought no woman should give birth to twins as they were never likely to be strong.

It seems to be true also that until the advent of the white man, neither tuberculosis, syphilis, nor chronic alcoholism was known amongst them, and the absence of these destructive agents in their heredity may also explain the fewer grossly defective individuals amongst them.

Investigations have been started to determine how far the various intelligence tests apply to natives. I have not had the opportunity of applying the tests to those who have been educated at such colleges as Lovedale, but amongst the natives generally the Binet tests are not applicable, though I have found several who are able to do all the Porteus maze tests. Some of my colleagues in South Africa are taking a great interest in this side of the work, and I have no doubt before long we shall have some useful information and interesting results. My observations have been mostly made in the Transvaal, and my remarks therefore apply more particularly to the natives met with in that Province.

I have tried to indicate what the problem of the feeble-minded is in South Africa, and it seems to me from what I have read to be almost identical with that in other countries. Results and inquiries so far made closely correlate with those found in the report of the Royal Commission 1908. You will have seen that the policy of the Government has been to bring all persons, whether suffering from defect or from disorder of mind, under one control—at the present time that of the Minister for the Interior. The Commissioner of Mental Disorders under the Act of 1916 and in the regulations has been made responsible for keeping a register of all mentally disordered and defective persons, and for seeing that they are under proper guardianship or care. In practice this means that the physician-superintendents and medical staffs of the various mental hospitals have had the opportunity of going outside their institutions, and making investigations in the various

prisons, reformatories, industrial schools, and the community generally in their immediate neighbourhood. Those physician-superintendents and other members of the medical staffs with whom I have discussed the question are unanimous in their approval, and say that it has added greatly to their interest in the work on the subject to get outside the old institution bounds, see for themselves and help to solve the numerous social problems which mental disorders and defects bring in their train. Psychological medicine is part of the curriculum of the Cape University medical course. The Physician-Superintendent of Valkenburg has been appointed lecturer in this subject, and the mental hospital becomes part of the teaching school of the University. It is probable that the Pretoria Mental Hospital will shortly be similarly related to the University of Johannesburg.

With regard to these wider duties of the medical staff of the mental hospitals, dealt with briefly in this paper, I hope you will agree that the lines on which the work is proceeding in South Africa are right, and that this wider sphere of work for them in a subject having such great social significance not only benefits them and gives them a better status, but leads to a broader view of their duties, and makes their services progressively more useful and important to the community and the State.

The Government in South Africa has done very much indeed to help forward the work in this cause, and it would be impossible to over-state what its progress owes to the work and never-failing interest of the successive Ministers of the Interior—first the Hon. Abram Fischer, then Sir Thomas Watt, and now Mr. Patrick Duncan—or to over-estimate the value of the results achieved by the persistent energy, experience, breadth of view and understanding of Col. H. B. Shawe, the Permanent Head of the Department.

Mr. President, I am honoured more greatly than I express by the request you made to me to tell this Annual Meeting the position in South Africa as it affects those who have the misfortune to suffer from some or other form of mental defect or disorder—how South Africa is dealing with the question and how trending. I obeyed you, Sir, with pleasure, as a member of the Association should, but I could wish that I were more worthy of the task. In conclusion, Gentlemen, I ask that you will render all that assistance which I know you can by your suggestions and helpful criticism.

Mental Hygiene and Prophylaxis in France.⁽¹⁾ By Dr. H. COLIN,
General Secretary of the Medico-Psychological Society of Paris.

IN February, 1914, there came before the French Senate a project for the revision of the law of 1838 regarding the insane. The law of 1838 states that "each department is to have a public establishment designed specially to admit and care for the insane." This article was rewritten in the new project as follows. "Persons suffering from mental affections which compromise public order or who are dangerous to themselves or others are to be cared for and detained in special establishments when they cannot be provided for at their own homes."

This simple alteration of words indicates an intention on the part of the legislature to bring asylums into line with hospitals and to remove the unjustified discredit which the public still attach to these institutions. And this is so true that the law has given the right to enter voluntarily into the asylum without being submitted to any legal formality.

The expression "mental affection" provoked a lively debate and, on the invitation of the Minister of the Interior, the Académie de Médecine, the Société Médico-Psychologique, the Société Clinique de Médecine Mentale, the Société de Psychiatrie, the Société de Neurologie, and the Société de Médecine légale were called upon to give their opinion on the respective meanings of the expressions "mental affection" and "mental alienation," and to state precisely their significance.

The war broke out before the new law was passed, and in course of its long duration it became apparent that outside the cases of recognised insanity there existed a large group of mental disorders which assumed a still greater importance. In the army one quickly became convinced of the impossibility of utilising the congenitally defective, those who, while not insane, were weak-minded. One saw that, by reason of their low intellectual level, they constituted a danger rather than a help.

One remarked how difficult it was to turn to account the perverse and anti-social; and finally one saw develop a number of mixed conditions, originating on a basis of mental defect, and one treated every manifestation of morbid emotivity, arising during the course of battle or following commotions or shocks produced by the instruments of destruction recently brought into use.

It was the same in the civil population of those countries which became included in the zone of war. The bombardments, the privations, the sorrows brought into strong relief the reciprocal influence of the moral and the physical which our philosophers of the eighteenth century, and in particular Cabanis, were the first to point out.

The events of these last years have shown, as my friend and

(1) A paper read at the Annual Meeting held in London, July 14th, 1921.

colleague Toulouse has said : " It is the psychism of individuals which constitutes the essential condition of all social activity. Though a serious lesion of one or more organs may be compatible with an almost normal professional life, a defective mental state, even slight, entails the diminution or the arrest of productive activity. In that which concerns the 'productivity' of an individual, as an element of the national prosperity, psychic integrity is thus of the first importance. And France, impoverished and exhausted by the war ought, more than any other country, to concentrate all her efforts upon the building up of her capital of psychic energy."

Now the war, by the fatigues, the emotions, and the privations which have affected civilians as well as combatants, has created conditions favourable to the development of neuropathic states. A pressing social problem has thus arisen. A large number of psychoses have manifested themselves, and it is not only in the asylums that they are to be sought. A crowd of unrestrained psychopaths wander mournfully into the consulting rooms of specialists or the hospital clinics, more or less adapted, seeking to recover their equilibrium, diminished in their capacity for production, and disabled in their power for direction.

The whole population has become in some respects more or less unstable. The increase of criminality, and especially of juvenile delinquency, the excessive debauchery which diffuses syphilis—a factor of nervous heredity—alcoholism always threatening, the weakening of the effort to work and of professional morality are the signs of a profound psychic disorder of collectivity. And the children born under these unfavourable biological conditions present a lessened resistance.

Up to the present one had to wait to intervene until the patients were certifiable. To-day, in the great prophylactic movement for the prevention of diseases, a place is made for mental disorders.

" *La Ligue d'Hygiène mentale*" was formed on December 8th, 1920, on the initiative of a committee composed of MM. Toulouse, Antheaume, Colin, Dupré, Genil-Perrin, Marie, Roubinovitch, and Séglas, under the patronage of M. Breton, Minister of Health, and under the Presidency of M. Brunet of the General Council. It was preceded by the Committee of Mental Hygiene of the Ministry of Health.

Its aim is to divulge the principles of mental hygiene and prophylaxis and to favour their application by constant pressure on the constituted powers and on public opinion. This is why it is subsidised by the General Council of the Seine Department and by the Municipal Council of Paris.

Insanity is, in a great number of cases, curable and avoidable.

It is so much the more curable the earlier it is treated ; it is so much

more avoidable as one submits the predisposed to a hygiene susceptible of exempting them from the action of exciting causes.

Accordingly, to trace and discover the predisposed and the psychopaths at the commencement, to advise and watch them, to organise the family environment from the point of view of prevention or cure—these are the general methods of mental prophylaxis.

The technique of mental prophylaxis consists in the first place of discovering, by the clinic and laboratory, the subjects who present a particular mental weakness, in order to place them under hygienic conditions unfavourable for the eventual outbreak of mental disorders.

It is in childhood that the psychopathic predisposition does the damage. At the school one should seek out, then, the abnormal and the backward in order to submit them to teaching adapted to their lessened psychic resistance, and to an education capable of impeding the development of their hereditary tendencies.

In industrial enterprises individuals presenting a greater mental fatiguability can be usefully directed towards work necessitating a lessened effort of attention, a lessened nervous expenditure, and permitting a minimum of causes of sensory excitation (noise, light) or of toxic influences (alcohol, essences, bi-sulphide of carbon, lead). A bad selection of workmen causes those who are unadapted to be more sensitive to the exciting causes of mental disorders.

The prophylaxis of crime is also, in a large measure, connected with the struggle against a psychopathic heredity, which is a frequent factor. Criminals are often unadapted types; a large number present a defective mentality.

Mental hygiene, then, will offer to all the predisposed a *régime* of life suitable to their mental weakness. It will afterwards interest itself to search for mental disorders in their early phases in order to combat them when they are the most modifiable, and to supervise the convalescence of the insane in order to prevent relapses.

The treatment of the psychopathic is at the present time imperfect. It only concerns itself with conditions of confirmed insanity, which has reached a stage when the chances of cure are restricted. The irksome formalities, and in a certain measure vexatious, of certification keep the milder cases away from the asylum.

The asylum in its present form is expedient only for the dangerous and incurable insane.

For mild psychoses and for acute mental disorders there ought to be reserved another method of treatment which permits the creation of uncertified wards and dispensaries.

The attendance at the out-patient department of the dispensaries will suffice in mild psychoses, the cure of which could be followed up at

home under the direction of competent specialists assisted by health visitors.

Uncertified clinics make it possible to avoid the social stigma of certification in the acute psychoses, in which, also, the association with the chronic insane impedes treatment.

During the war the army has undertaken the treatment of the insane in ordinary hospital wards, two public asylums having been converted into military hospitals, and of about 20,000 patients of this kind admitted in *le Service Central de Psychiatrie du Val de Grâce of Paris*, only 5,000 have been transferred to the asylum; the cure of 15,000 mental cases has thus been effected without certification.⁽¹⁾

La Ligue d'hygiène mentale comprises honorary members, donors and foreign correspondents.

It is administered by a council of administration composed of alienists, Members of Parliament, high officials, professors of the various faculties, writers, philosophers, jurists, and philanthropists.

It is placed under the ægis of a committee of patrons comprising high political personalities: MM. Léon Bourgeois, Raymond Poincaré, Herriot, Pamlevé and others.

Nine Commissions share the work which the different branches of activity give rise to.

These Commissions are the following:

- (1) Physical Diseases and Mental Disorders.—President: Dr. Klippel.
- (2) Alcoholism.—President: Dr. Legrain.
- (3) Defective Children.—President: Dr. Roubinovitch.
- (4) Professional Work.—President: M. J. Lahy.
- (5) Anti-social.—President: Dr. Henri Colin.
- (6) Dispensaries for Mental Hygiene and Uncertified Services.—President: Dr. Toulouse.
- (7) Public Assistance and Legislation.—President: Dr. Marcel Briand.
- (8) Teaching of Psychiatry.—President: Prof. Dupré.
- (9) Organisation and Propaganda.—President: Dr. Antheaume.

There exists in addition a central committee functioning as a permanent Consultative Commission, trusted with the control of the elaborate work of the different Commissions and with giving them the definite form necessary for their presentation to the public or the authorities.

The activity of the League is assured in the provinces by regional delegates, responsible for propaganda, for recruiting members, for influencing local authorities, and for eventually constituting local or regional committees.

By its foreign correspondents the League hopes to secure an international connection amongst all workers interesting themselves in

⁽¹⁾ As in this country, these patients were kept in hospital by virtue of their military status.—EDS.

questions of psychiatry and mental hygiene. It aims at realising, in concurrence with the Committee of Mental Hygiene of New York, an International Federation of the League of the Committees of Mental Hygiene, with which has associated itself the *Société de Freniatrie Italienne*, and we hope soon our British friends and allies.

Our programme, you see, is a large one, and greatly exceeds the limits of the problem of simple mental disorder.

But I should not forget that I am here amongst alienist colleagues, and you will permit me to return to that part of the organisation of the League which deals with the assistance to patients afflicted with mental disorder, understanding this term in its widest sense.

Where will those patients not certified be treated? It will be necessary to create for them open services or wards. Dispensary clinics would be independent, and in this case it would be easy to organise them. In the contrary case ought they to be annexed to hospitals or ought they to be made part of the ordinary hospitals?

In France the law of 1838 is silent on this point. It did not foresee uncertified clinics, any more than it foresaw family colonies. Now family colonies exist in France and prosper. It will be the same with uncertified clinics; and already at Fleury-les-Aubrays, near Orléans, services exist where the patients can enter voluntarily. Thus nothing prevents the generalisation of the system.

I believe that for the care of this kind of patient it is necessary to entrust them to doctors with a long practical experience of mental disorders and to a trained nursing staff, and to treat them in appropriate buildings, conditions which are only met with in asylums for the insane.

I will ask you to consider here the difference which exists between the terms *mental affections* and *mental alienation*. One has a tendency to oppose the two terms and to consider patients suffering from *mental affections* as being always harmless. In respect to this my colleague Dr. Truelle excellently says: "The two terms are not synonymous. The former is purely medical. It is widely comprehensive and applies to all mental disturbances, whatever may be their origin, their nature, their severity, their manifestations and their consequences.

"The second is more restrictive; it only applies to a portion of the individuals suffering from mental affections or only to a temporary or lasting period in the evolution of these disorders. It has a character social rather than medical. It envisages mental affections solely from the point of view of their consequences. . . .

"Take, for instance, an individual suffering from intermittent insanity, in the interval, often very long, of the phase of excitement or depression, he does not cease to be under the control of this form of mental disorder (intermittent insanity), though no one would think of regarding him as alienated at this time. This is an extreme case.

"Take a simple depressive, a neurasthenic, a mild hypochondriac, a mitigated obsessional, or simple phobic, such as exists amongst even those who fulfil the highest social functions—they are all suffering from mental affections, but none of them are alienated; and one evidently should not take the same legislative measures in regard to them as towards the insane who exhibit reactions actually or virtually dangerous.

"Take again the senile or paralysed, with slight intellectual enfeeblement, whose memory is beginning to fail, with perhaps a simple aphasia; all these also are suffering from mental affections; they are not in a social or administrative sense insane or alienated.

"But these same intermittents may develop a crisis; these same depressed, hypochondriac, obsessed, or neurasthenic may advance a step further in these mental affections and present ideas of suicide, tendencies to self-mutilation, or aggressive and criminal impulsions; amongst these same intellectually enfeebled the dementia progresses and they become incapable of managing themselves, of discerning and avoiding a danger; they have episodes of confusion, of attacks of excitement and turbulence, in the course of which they are disturbing to public order, or they run the risk of burning their house, or they simply become, from the single fact of their inability to manage themselves, a burden to their family, or a too easy prey to all the unbridled appetites of those around them; and thus these same invalids suffering from the same mental affections become the insane.

"These few examples, chosen deliberately among the extreme cases, show well the distance which, in the sense that I use it, separates the two proposed terms. When one places oneself at the point of view of the legislator, it is not so much a difference of nature nor even of degree in psychic disorders which converts a mental affection into a mental alienation; it is at least as much by extrinsic circumstances as by intrinsic considerations that this transformation comes about. It is the reaction of the patient, the *milieu* in which he has to live, which, in many cases, make an individual suffering from mental affection an alien (insane), that is to say a patient whom society ought to take care of, in that it has the duty of protecting him against himself, against others, and indeed sometimes against his relations."

The Société Clinique de Médecine Mentale transmitted to the Ministry the following reply, which will certainly have an influence on the drawing up of the new law in respect to the insane:

"The expression 'mental affection,' the meaning of which is wider and less precise than that of the expression 'mental alienation,' denotes mental alienation, and also other morbid states characterised by mental troubles. Those persons suffering from mental affections ought to be regarded as alienated—

"(1) Who compromise public order.

"(2) Who are, or may become, dangerous to themselves or others.

"(3) Who, incapable of properly managing themselves or of supplying their needs, do not receive from their immediate *entourage* or from public assistance the supervision and care that their condition renders absolutely necessary.

"Thus only the alienated, to the exclusion of other patients afflicted with mental disorder, ought to be the object of legal measures restrictive of individual liberty.

"The substitution of the expression *mental affection* for the expression *mental alienation* might have the consequence of improperly extending these measures. There is thus cause for avoiding such a substitution.

"Now patients suffering from mental affections in general, and not merely the alienated, deserve to be treated, and the law could extend the benefit of personal or voluntary placing to all mental affections.

"As far as this refers to the poorer classes, and if one excludes some hospital services of the large towns, the insane asylums are actually the only establishments for the treatment of mental affections in general, and there is nothing to hinder those persons suffering from mental affections, but not alienated, from being treated in the asylum, if they desire it, if they enter freely, if their stay in the establishment is medically justified, and if they leave freely, though not cured, upon the single condition that they are not dangerous. The opposition of the responsible physician to the discharge of a voluntary patient should always become the object of an immediate and careful inquiry analogous to that occurring on admission."

In waiting for the law to be passed, it is important to assist the cases resulting from the war or patients suffering from the sequelæ of nervous affections contracted during its course. I quote here a passage from the report submitted to the Council General of the Seine by M. le Conseiler-Général Brunet: "For those patients, who were designated under the term '*petits mentaux*,' were organised during the war in the asylums of Maison-Blanche and of Ville-Evrard military open services, not subject to the law of 1838 aimed at the *régime* for the insane.

"But the services created having been closed after the war, these psychopathic cases have remained without treatment. According to the law of March 31st, 1919, they have certainly the right to treatment, but in actual fact this law is inoperative because there do not exist the hospital services to receive them. The hospitals do not recognise them as suffering from disorders demanding urgent cure, and the asylums are only open to the individuals who are in the condition required for their certification according to the formalities of the law of 1838.

"Now these psychopathic cases, left without direction, are very often incapable of re-adapting themselves to social life. They exert upon

their *entourage* an unfavourable influence, they all remain more or less diminished in their productivity, and can even drift to anti-social reactions, whereas many amongst them could be re-educated and recuperated by treatment and appropriate direction; and that is a loss to France collectively, already so impoverished in workers by the war and depopulation.

"These unfortunate ones, interesting by reason of the origin of their illness, are not to be differentiated from those fallen ill in civil life, and whom the administration and the doctors have always had to occupy themselves with. We here speak of patients suffering from psychopathic disorders so light as to be able to live at liberty, and yet sufficient to prevent them from leading a normal life and carrying out work sufficiently productive.

"They constitute the mass of neuropaths, neurasthenics, psychasthenics, hysterics, all those obsessed, phobic, or impulsive whom Magnan has included in his group of degenerates, and who are only modalities of what the alienists have always described under the term of insanity with consciousness.

"For insanity is separated from mental equilibrium by insensible degrees. And what approximates all the cases, whether they appertain to the simple neuropathy or confirmed alienation, is the similar origin (the influence of the predisposition, especially heredity, exciting causes represented by fatigue, emotions, intoxication); there is also a constitution, common to both, characterised by a great fatigability and a feeble resistance to disturbing causes; it is equally the fact that some patients pass easily, in the course of their existence, from a benign psychopathic state to a severe one; and, lastly, the same physical or psychic treatment is applicable to them. Now in actual organisation the law has foreseen the treatment for enfeebled patients, children, old people, infirm, and pregnant women. Only the psychopaths are not compulsorily assisted by any organisation adapted to their condition. The law of 1838 relating to the care of the insane is the only one which could be applied to them, but at the time it was elaborated the public authorities were more concerned with the protection of society than with the interests of the patients. That is why it has imposed the procedure of certification upon all the psychopaths.

"In this way a ditch has been dug between the inoffensive and the anti-social forms of alienation, and the former are debarred from every kind of treatment. Also in the movement which has created the dispensaries for physical disorders no place has yet been made for psychic illnesses.

"This is the origin of the prejudice against all the insane and against the establishments which are utilised for them—a grave prejudice which

marks with a stigma all individuals suspected of mental trouble, even mild or transitory, which makes the patients keep away from the asylum in the early stage of their illness when they would be more readily curable. One of the gravest results of this situation—for it is well established that the chronicity of mental trouble depends upon the absence of early treatment—is that individuals suffering from acute and transitory mental disorders are not brought to the asylum.

“It is this prejudice which has chiefly pushed forward the creation in the hospitals of ‘services for acute deliriums,’ which are most often only haphazard services. The nurses and the accommodation are scarcely adapted to this kind of patient and do not afford them, notably against suicide, a sufficient security. And, in spite of the worth of the doctors who are in charge of them, one fears that the patients could not receive there the care which alienists could give them.”

The experience of the war has shown the importance of an organisation highly specialised. In the service at Villejuif reserved to certified military patients I have been able to obtain 729 recoveries in 1,701 soldiers treated.

In all ways a grave gap appears in the treatment of psychopaths, which remains subject to conceptions bound by limitations—a liberal form of treatment which may be in harmony with the actual state of psychiatric science and of the general mentality. And this gap tends generally to transform the patients into chronic cases, more or less lost to productive activity, and who often end by falling completely to the charge of their district.

This is why it is suitable to study the organisation of dispensaries and uncertified services for the free psychopaths. It is not to be doubted that the law of 1838, which has enjoined the treatment of the insane under the single form of certification, was in principle designed to provide treatment for all psychopathic cases. It is then for the department which has the charge of them to organise it under a new form.

The place of these departmental services is rationally indicated in the departmental asylums for the insane, which are on other grounds the best adjusted to this kind of patient in their medical and nursing staff, and also by the structure of the premises.

The proposed free services ought to be opened with a right of priority to the pensioners of the war. But, for the reasons already mentioned, they ought to receive also the patients, men and women, of the civil population.

But in order that these services may be rigorously used for the patients to whom hospital treatment will be useful, an out-patient clinic for selection will be necessary, as has been recognised in America.

The organisation of uncertified wards in the asylums will be the most efficacious method of combating the prejudice which attaches itself to

asylums and to the insane, and which will only disappear when these institutions become nearer akin, in consequence of the adjunction of uncertified wards, to the ordinary general hospitals. One can then replace the name "asylum for the insane" by the name of "hospital," placed under the patronage of the great names of psychiatric science.

The *Ligue de Prophylaxie et d'hygiène mentales* considers: "That the treatment for lucid and harmless psychopaths is not provided in the Département de la Seine, where only closed asylums are in existence, subjected, by the formality of certification, to the rigorous prescriptions of the law of 1838.

"That this form of treatment, which does not conform to the state of psychiatry, nor to the modern conception of treatment, is particularly unjust in respect to former soldiers that have been designated under the term *petits mentaux*.

"That the treatment in uncertified wards has been realised with success during the war by the Military Government of Paris in the Asylums of Maison-Blanche and Ville-Evrard, and it is increasingly adopted in different countries, notably in the United States, Germany, and Switzerland, under the form of open wards and dispensaries.

"That this new form of treatment best meets the needs of the patients and the department in furthering the prophylaxis of mental disorders, in avoiding the development of chronic conditions, and in bringing the asylums into line with the ordinary hospitals, while providing for the patients the treatment by specialists, and trained nurses in suitable buildings.

"It was proposed: 'That the General Council assure the treatment of lucid and harmless psychopaths in open wards placed in the asylums of the Seine.'

"Voted by the General Council of the Seine Department, July 9th, 1921."

One thus sees in France that the question is clearly put and found the commencement of its realisation in the creation at the Asylum of St. Anne, of an open service for psychopathic persons. The Minister of Health marked his approbation of this reform by granting to this service a subsidy of 40,000 francs from the funds of the "Paris mutuel." It is now necessary to explain the reasons which have incited us to pass such strong resolutions.

We know very well that patients suffering from mental disorders experience an instinctive and sometimes insurmountable repugnance to confess them to themselves and make them known to others. They consider themselves, and their parents consider them, as simply nervous. Well-to-do patients, however, consult a neurologist, who sends them to a sanatorium or asylum where they meet with doctors qualified from the point of view of practical psychiatry, and a trained nursing staff to give

them appropriate treatment. And will it be the same in the hospital and for the poor? Obviously no. They will there find themselves, it may be in a general ward, it may be in a neurological ward, in a place not suited to receive them, with nurses unused to the special treatment which they require. And here appears the fundamental difference which exists between neurology and psychiatry. When I had the honour to preside at the Société Medico-Psychologique I attempted to give the reasons for this difference. In speaking of the precision and clearness, the effort of analysis and synthesis which the study of diseases of the mind necessitate, I added: "One has wished, during these last years, to blend psychiatry with neurology. I count amongst neurologists too many teachers and friends, I have retained from my studies at the Salpêtrière too deep and vivid a memory not to have been one of the first to wish for a more intimate union of these two branches of disorders of the nervous system.

"Unfortunately, upon reflection, this fusion does not appear to me possible. They are the two parallel divisions of the pathology of one and the same system, which can never meet each other nor blend together. The disorders and the methods of observation are not the same.

"Whilst in neurology the objectivity of certain cardinal symptoms permits a rapid and most frequently precise diagnosis, in mental medicine prolonged observation is often indispensable; observation in which not only the physician participates, but all his assistants, even the most modest; observation which necessitates the analysis of transitory functional disorders and those innumerable modifications of intellectual phenomena; observation which must include a psychological understanding of the patient, his tendencies, his reactions, and his affectivity.

"That is why no other branch of medicine requires so long an apprenticeship as the study of mental disorder. It is only after an experience of many years that the psychiatrist is qualified to express an accurate prognosis in his cases. This is a truth that one cannot impress on one's mind too much, and I am certain that all those of my colleagues who, like myself, have behind them a career unhappily already very long, will be of my opinion."

It is convenient to add that in hospital wards no serious classification could be made between the definitely insane and simple psychopaths. It will result from this that very soon after their admission the querulants, the persecuted, the obsessed cases, not experiencing a rapid recovery, will complain of not being treated properly. They will lay the blame on the nurses or doctors, will demand their discharge, or, what will be more serious, will exhibit violent and dangerous manifestations, without the possibility of any measure of protection being taken in this respect, and which would not be the case in an asylum where the premises are specially designed for the purpose.

The experience of the war argued in our favour. If it is true that during the war one has not certified a large number of psychopaths, at least in France, it is proper to add that in the Department of the Seine, through which 20,000 patients passed, the 15,000 "*petits mentaux*" not interned were treated in the insane asylums transformed into military hospitals. From the point of constraint the military hospitals have no need to be envious of the asylums. The discipline there is much more severe. Moreover, they were treated not only by psychiatrists belonging to the army, but also by nurses of the category of asylum staff. Lastly, when, after a period of observation, certain of these patients were recognised as being not minor psychotics but definitely insane, who might eventually become dangerous, they were certified and were immediately transferred to the special military sections annexed to the ordinary asylums. Thus it is that at the military section of the Asylum of Villejuif I have treated 1,700 soldiers.

In concluding I must apologise for the length of my paper and must thank you for the kind attention with which you have listened to me.

Legislative Restrictions in Connection with the Treatment of Incipient Insanity.⁽¹⁾ By Dr. WILFRID COROLEU, Secretary of the Royal Academy of Medicine, Barcelona.

I cannot commence my paper without first expressing the great pleasure I had in accepting the kind invitation of your President to read a paper at this meeting. Since 1904, when I was elected a Corresponding Member of your Society for Spain by the good offices of Dr. Rayner, I have always endeavoured to be useful to your Association. My yearly contributions to the *Journal of Mental Science* regarding the progress of psychiatry in Spain were part of my efforts in this direction, but in addition I have written for Spanish mental reviews many articles concerning the psychiatric aspect of Anglo-American religious revivals, insanity in Ireland, the clinical and historical cases of Bunyan and Cowper, etc. My career as Provincial Inspector of Lunatics in Barcelona, then of Superintendent of the Las Corts Private Institution and as Secretary of the Royal Academy of Medicine did not restrain my sympathies with England during the gloomy days of the war in a medical world not always favourable to the good cause. So it was welcome news to me to be invited to your Annual Meeting, and if my time permitted I would be glad to come every year. It is always a *laborum dulce lenimen* to discuss cordially among friends matters related to our profession. From my own standpoint as medical expert to the judicial district of Barcelona I venture to think that

⁽¹⁾ A paper read at the Annual Meeting held in London, July 13th, 1921.

I have gained so considerable an insight in the medico-legal problems of insanity that I have chosen one of them as the subject of my paper. I submitted it to your President, who approved of it.

Popular prejudice has caused to be embodied in all the laws procedures which operate against the early treatment of insanity.

The fear of illegal sequestration kept alive by novels, plays, and cinematographs is as much a nightmare as the possibility of premature burial. When sentiment, or more correctly morbid sentimentalism, has reached this point no amount of reasoning will avail. It is for this reason that legislation is so much in arrear as regards the real necessity for a more enlightened treatment, especially of incipient cases. The treatment of the patient, which would be the first thing attended to in every other disease, is a secondary consideration. The extent of this evil is very apparent to those of us who are mental specialists, and who know by daily practice how much time is wasted before a diagnosis is made and proper treatment commenced. A mental physician very rarely sees real incipient insanity. I will leave here out of consideration the dangers arising from the possible aggressive and impulsive conduct of the insane and confine my remarks to the therapeutic aspect of the problem.

The confinement or the rational treatment of mental cases, which by their acute course and impending danger are in no ways different to cases of pneumonia or diphtheria, meets such obstacles that the most unprejudiced of enlightened observers will readily understand that our lunacy law is wholly out of date, and savours of an archaic conception of insanity.

Legislation has proceeded on different lines in various countries, and I do not propose to make now a study of this matter, which would be both tedious and useless. In your country it is not long ago since the Medico-Legal Association interested itself in the late Dr. Maudsley's bequest. Following this, your psychiatrists took up the question and discussed it exhaustively. What has impressed me most is that legislation in England—and I believe everywhere—is more liberal in lunacy matters than in Spain. So I fear I cannot support the kind suggestion your President made in one of his letters, "that perhaps in Spain there are not such legal restrictions." In Spain, on the contrary, there are so many that I am certain we could not possibly have more. Such an unfortunate position affords a great matter for study and discussion. It embodies all that red tape can do to hinder proper treatment of cases, and it presents therefore a problem which reaches a climax of complexity.

After much conflicting legislation in reference to the treatment of insanity, a Lunacy Act was passed on the initiative of Senor Romero Robledo, then Minister for the Home Department, which embodies all

the popular prejudices against lunatic asylums and private mental institutions. The admission of patients is subject to a certificate signed by two physicians who are without any special qualification. They are to have visited the patient both together and singly. Diagnosis is not necessary, only the affirmation of the presence of a mental disease and its dangerous character. This latter point is so much emphasised that a *Royal Order* of Senor Garcia Alix, the Minister of the Home Department in 1903, expressly provides that "if the patient can remain quietly at home without greatly disturbing it and without danger, there is no necessity of *so hard* and repressive a treatment as that of a psychiatric clinic." After this certificate has been signed, it is the duty of a medical officer of health called *subdelegado* also to visit the patient. Then the nearest relative of the patient presents the papers with an application signed in his name to the mayor of the city in which the patient dwells. Here legislation ceases and custom begins, as municipalities have no uniform regulations. The mayor usually makes provision for further investigation, which in Barcelona concludes by the patient being visited by two municipal physicians, who make confidential reports. Provincial governors and mayors can dispose of urgent cases by ordering their immediate seclusion prior to the completion of the certification and subsequent steps alluded to. Judicial cases are regulated by the procedure of criminal law and referred to a competent tribunal.

I need not state the drawbacks of such a legislation. The certification by the two physicians only lengthens the time of detention of the patient, and is often a mere formality. The *subdelegado* seldom visits the patient as he is directed by the law, so his intervention only means a fee for his signature and seal. Sometimes his report is unsatisfactory or defective, which is another source of conflict. But these are small drawbacks in comparison with the mayor's intervention. The municipal physicians are appointed in rota, and need no special qualification, so their reports are frequently a hindrance not always easy to overcome. The preparation and disposal of documents is so delayed that cases of dangerous patients occur who are arrested and detained in municipal dispensaries for days and days awaiting the conclusion of the red-tape operations.

This is not all, however, for after three months' treatment the family has to obtain a confirmatory order before the patient can remain in an asylum or private institution. Formality is so much a feature of the official machinery that there occurs to me a very curious anecdote *à propos* of the time I was Resident Physician at the Holy Cross Asylum. I had sent a certificate relating to an old woman with senile delirium, and the secretary of the hospital returned it to me as I had not mentioned any aggressive impulses, an inclusion of which only could

make available a confirmatory order. This is an instruction by a judge sitting as in a civil suit. It implies an application by the family before a magistrate, the visiting of the patient again by the medical expert of the judicial district, and the publication in the official journal of the province of the proceedings, giving thirty days' time for one information to be given. The difficulties created by these regulations are impossible to realise without experience of them in daily practice. Families annoyed by these time- and money-wasting formalities evade them by all the possible artifices human ingenuity can suggest. Sometimes they are successful, but provincial governors from time to time make compulsory regulations in these matters. Judicial routine work in civil cases is always unsatisfactory. I speak of cases regarding which a subordinate magistrate has to intervene, causing delay by being either over-careful or careless. Sometimes families discharge the patient before recovery in order to avoid the annoying regulations necessary to continue institutional treatment.

The father of one of my patients in Las Corts Private Institution, a somewhat eccentric person, was so much worried with the difficulties attending the obtaining of the confirmatory certificate that he shot himself.

When I was Provincial Inspector of Lunatics in Barcelona I suggested the establishment of a clinic for observation of mental cases in order to lessen the overcrowding of asylums. The Catalan Mancommunity has power to do this, which the provincial council of those days did not possess, and my suggestion is about to be carried out. Overcrowding still continues and increases daily, so much that stringent regulations have been made by provincial councils to overcome this evil. As one would expect, such regulations in actual practice are rendered futile by new obstacles. In Catalonia, Mancommunity—the union of provincial councils (Barcelona, Tarragona, Lérida, Gerona)—has assumed, with the medical directors, the control of the asylum service. The provision of accommodation for patients is a difficult matter owing to the fact that the financial state of most of the provincial councils in Spain is far from flourishing.

There are a certain number of institutions in Spain (chiefly monastic) which dispense with legal regulations and attend mental patients. They are, however, few in number, and generally for women only; and as they reserve the right to discharge the patient when he is dangerous or noisy the usefulness of such institutions is very much restricted. From one of the most crowded of them in Barcelona they returned to me a female patient the day after her admission there because she had threatened suicide. These establishments are also very expensive to live in, consequently patients are sooner or later transferred to private mental institutions or asylums. I have no prejudice against these, but

I believe they only flourish because of the state of law, and the restrictions placed upon the admission of patients to "authorised" institutions.

It is hardly necessary to say that all this obsolete legislation is not advantageous to the early treatment of the insane. I have seen acute patients die before they could be admitted to proper care. This state of things impressed me so much that I gave facilities for such admission at Las Corts before certification was completed. However, some disagreeable incidents convinced me of the necessity of strictly adhering to law. Mental sufferers are frequently practically unattended. A rich Belgian engineer who was insane and travelling in Spain was admitted provisionally to jail. Patients confined in rooms are by no means an infrequent example of what Senor Garcia Alix would have called in 1903 "family care." I may add that "family care" as is practised in Belgium, France, England, United States, and Germany is unknown in Spain, though advocated as early as 1856 by Dr. Pi Molist, the founder of the Holy Cross Asylum, who visited many of your institutions, which he eulogised in his *Memories* and for whom I have the greatest respect. Spanish psychiatrists are not infrequently asked why so few mental cases recover. The true reply would be that legislative restrictions hamper the practice of psychological medicine, which, even under the most favourable circumstances, is a difficult matter. If surgeons had first to overcome, before commencing operations, all the obstacles we have put in our way, of a surety their recoveries would be very few. The saying of Hippocrates, *Occasio præceps*, would be adopted and put in practice. In these matters, as in many others affecting the social life, egotism has passed for altruism. The fear of being incarcerated as a lunatic has inspired all lunacy legislation in Spain, claiming to be founded upon the righteous and truly human principle of poor sick people, our brethren. Clinical institutions for the insane should be open to patients as those devoted to all other branches of medicine and surgery. If legal authorities maintain that a notification of such cases is imperative this could be readily done, and no mental physician would object to it. A "board of control" as in England would not be objected to, but to hamper the difficult and ungrateful mission of the mental specialist with regulations that can only jeopardise the welfare of patients is a proceeding against which we shall continue to protest with all our strength, and reason and justice is on our side.

In conclusion I am glad to have had the honour of speaking at this meeting of your great Association in the land of Tuke, of Conolly, of Maudsley, of Clouston. I thank you for your kindly attention, and will not fail to carry back to Spain your sympathy and goodwill.

The School Medical Service in Relation to Mental Defect.⁽¹⁾ By
G. A. AUDEN, M.D., M.A.Cantab., F.R.C.P.Lond., D.P.H.
Cambs.

WHEN our President invited me to contribute a paper for this meeting, I understood that it was to be of the nature of a presentation of the case of the school medical officer in relation to a unification of those medical services which deal with the various aspects of mental defect. This I have attempted to do in the belief that if real constructive work is to be done, the foundations must be laid by examining the problem as it is manifested in childhood and early youth. This is comparatively easy, because not only does a very large proportion of children and young persons now come under continuous medical observation, but there is in addition the important testimony which their educational progress affords as to their mental make-up. Further,

believe that the practical solution of the question of mental deficiency from the point of view of the community at large will depend for its completeness upon early diagnosis, and upon the measures which are taken to deal with the subjects before they reach adult life. In one of his addresses, Dr. Oliver Wendell Holmes urges that in these days of specialisation we must not neglect the older theories which have yielded place to new. "The *débris* of broken systems and exploded dogmas form a great mound, a Monte Testaccio of shards and remnants of old vessels which once held human beliefs. If you take the trouble to climb to the top of it, you will widen your horizon." To none is this advice more needful than to those of us who are brought into contact with mental defect and all its attendant problems. There is still so much confusion of thought, the result of changing points of view, that we do not always see clearly the end to which our efforts should be directed. This is of practical importance, because upon the standpoint from which we view the problem will depend, not only the range of our activities, but also the particular members of the community whom we hope to include therein.

The primitive *theurgic* point of view, that mental deficiency is a manifestation of the inscrutable wisdom of a Divine Providence, need not detain us, though it still lingers in the folk-lore of the country. Nor need we delay over the next view-point, the *compassionate*, which gradually replaced that indifference to social questions which characterised the first eight decades of the eighteenth century. The revelations given in the report of the Metropolitan Commissioners in Lunacy in 1843, of the tragedies of the mentally deficient up and down the country, brought about the first establishment of institutions for the

(¹) A paper read at the Annual Meeting, held in London, July 13th, 1921.

mentally deficient, solely on compassionate grounds.⁽²⁾ The criterion here is simply the possibility of ill-usage of the individual, irrespective of the degree of mental inefficiency. The experience of the institutions founded with this protective object led the way to the next stage of public opinion, *viz.*, the *educational*, for the aggregation of the mentally deficient showed how variable were their capacities, and how much might be done to improve them by appropriate training. This educational point of view did not come into prominence until the experience gained from the Elementary Education Act of 1870 drew attention to the fact that there are many children who are neither idiots nor imbeciles, yet are unable by reason of mental incapacity to gain any advantage from the education offered to them.

The Elementary Education (Defective and Epileptic Children) Act, 1899, is frankly based upon this educational point of view, for it defines those who come within its purview as children who, "not being merely dull and backward, are by reason of mental defect incapable of receiving proper benefit from the instruction in the ordinary public elementary schools." It was believed, moreover, that the question of the future of those children could be solved by educational methods alone. By smaller classes, by a modified curriculum and by retaining them in school until sixteen years of age, it was confidently expected that these children would catch up their quicker-witted comrades and become efficient members of society. The result has, of course, completely falsified this expectation.

In the meanwhile yet another viewpoint—the *sociological*—was rapidly gaining ground. Social workers of every description found themselves brought up against the protean problem of mental defect whichever way they looked. Crime, vice, pauperism, drunkenness and all the other maladies of the body politic were seen to be closely associated with a common basis of mental inefficiency. Accordingly the community has veered more and more to the sociological standpoint. The Mental Deficiency Act, 1913, is the direct outcome of this attitude, for the definitions therein used are essentially social in character, and depend upon the capacity of the individual for reaction to the social environment.

The last point of view which may be mentioned here merely to complete the catalogue is the *eugenic*, which, important as it is, hardly comes at present into the realm of practical politics.

Now the distinction between the educational and the sociological standpoints is fundamental. Failure to recognise this distinction is a bar to progress, for the ultimate criterion is social efficiency and not educational aptitude. The only sound method of approach to the subject must be a teleological one, and the end at which we aim must be clear and defined, even though the questions which interest us and

the methods we adopt to meet them may differ according to the side from which we approach the problem as a whole.

If we take the educational standpoint, then we must appeal to the physiological psychologist to help us to answer the many complex questions which present themselves, *e.g.*, the mechanism of speech with its complements, reading and writing, that of the conceptual capacity for form and number, and the like. If, however, we look at the question from the sociological standpoint we must study all those varied reactions upon which are based reason, the capacity for judgment and for deliberation, the capacity for choice of action and postponement of motive and all that constitutes "character."

It will be readily granted that individual cases will very often show an educational incapacity coupled with an inability to conform with the accepted canons of a complex social order. But the question which arises is whether these deficiencies are mutually independent or whether they are based upon some common factor. Of the relative importance of these two manifestations of mental activity there can be no question. Many a man has been an excellent citizen who has not had the advantage of even a rudimentary education, and much of the rough work of the world must always be done by persons who would fail to pass a series of simple mental tests. But the converse cannot be held. The annals of criminology contain the records of many who, despite every educational opportunity and good mental capacity, have failed to show that control of their self-regarding instincts in conformity with the idea of the good of all which is necessary to ensure the stability and well-being of the community.

The relation of educational capacity to conduct may be compared with that of carbon dioxide in an atmosphere. Just as the amount of CO_2 in the air of a given room, by the readiness with which it can be measured, forms a useful index to the amount of other deleterious substances which are generally found to be co-existent with it, so, since aberrations of conduct are generally found to be associated with a reduction in educational capacity, mental tests give indirect indications of the degree of capacity for moral control which may be predicted. It is, however, a prediction of probability only, not a mathematical certainty.

On the educational side the two factor theory of intellectual capacity is now generally accepted. Under this theory intellectual capacity may be described as a function of two variables, the variation of the two factors being independent. These are, first, the general intelligence factor, the result of the functioning of the brain as a whole, innate and therefore subject to the laws of heredity; and, secondly, the specific educational capacities for reading, the formation of number-concepts, etc., which depend upon the functioning of certain focal areas of the brain.

The wide variability, both in degree and date of emergence, of these capacities upon which the acquisition of a "Three R" education depends, reflects their comparatively recent appearance in phylogenetic development. Thus their appearance may be precocious, as in the infant prodigies or "Wunderkinder," or it may be delayed. Again, this delay may be permanent or of a temporary character, in which latter case the capacity may be said to be "larval," in that it is analogous to the persistence of larval characters into later periods of life—a phenomenon which is found especially amongst the Amphibia (Neoteny). This is found to be by no means infrequent in connection with the acquisition of the art of reading, delay in which results in the so-called "word-blindness." This disability, some degree of which is much more common than is generally supposed, varies within wide limits, and there is no need for any differentiation between the condition of complete word-blindness and the minor forms of dyslexia or of persistent bad spelling. These are questions of degree alone. Yet this departure from normal may be co-existent with varying degrees of general intelligence, from low-grade feeble-mindedness to sound capacity. Thus in a recent paper Wallin⁽³⁾ has shown that in eighty-five consecutive cases examined at the St. Louis Psycho-Educational Clinic, the intelligence quotient (*i.e.*, ratio of mental age to chronological age) varied from 54 to 104, and only 5.2 *per cent.* graded as feeble-minded. On the other hand, in an investigation I made in 1912 into the reading capacity of 53 children in a special school, mostly over twelve years of age, I obtained the following results:

No knowledge of letters	.	.	.	.	.	1
Few letters only	.	.	.	.	.	20
Few simple words and letters	.	.	.	.	.	5
Words of two and three letters	.	.	.	.	.	3
Unable to read a Standard I primer	.	.	.	.	.	24
						—
Total	.	.	.	.	.	53

The following results of the attempt to write from dictation by the uppermost class of another school for the feeble-minded show how wide-spread is this disability. The sentence given was—"I saw the dog run after the cat."

I soit to dall.

I sise a dolls run a.

I sue a dag ran cat.

I sue a dog rat.

I see the bad run rue.

I suse a dog I suse a rune.

I gam a god I cat.

I suse a god. I suse a god rune rute the cate.

I shall the god run after the cat.

I saw a bog rad.

I saw dog ran dot cat.

I saw a dog run at the cat.

I was he dog run.

I saw a dog rus after the cat.

I sure a gad run tete the cat.

I juse the god run teaf cat.

The special interest of this abnormality lies in the analogy which it presents to the disorders of speech and other aspects of symbolic thinking and expression shown by adults suffering from brain injuries and war neuroses, described by Dr. Henry Head.⁽⁴⁾ These and many similar problems await solution.

We have taken this disability as a type of educational problem because it is by far the most frequent cause of the presentation of children for examination by the school medical officer. It is in itself a purely educational problem, and the co-existence or absence of feeble-mindedness must be gauged by other manifestations.

It is clear that a sound training in educational psychology is necessary for the examining medical officer if he is to avoid pitfalls. Such a training can only come with experience; but such experience cannot be obtained except by association with educational organisation.

But on the sociological side also the school affords problems of importance and complexity which equally demand a special training on the part of the school medical officer. It may here be recalled that the definitions given in the Mental Deficiency Act, 1913, of the classes of persons to be dealt with have a sociological basis, for the differential criteria are the degrees of social inefficiency exhibited in the conduct of the individual. The use of the term "moral imbecile" in the Act is not altogether happy, for it appears to set an official seal of approval upon the supposition that there exists a specific ethical or moral sense as distinct from the general capacity for reason and judgment. If pushed to its logical conclusion this would mean that law depends upon morality and not morality upon law. Moral conduct is a part of man's mental reactions, not as an individual but as a member of a society. To maintain the converse is to go back to the standpoint of the Intuitionist and the ethical theories of Shaftesbury and Hobbes.

It is true that one of the chief difficulties which are met with is that presented by the "moral deviate," for it is not lack of knowledge or lack of intelligence which produces the individual who persists in anti-social, perverse or immoral conduct despite exhortation, reprimand or punishment. It is now becoming recognised that many of the delinquencies and peccadilloes of children have their origin in past experiences, which by their unpleasantness have been repressed into the unconscious

only to reveal themselves subsequently by aberrant conduct. I am more and more convinced of the paramount part which is played by the repressed complexes of childhood, not necessarily sexual, in the often strangely perverse conduct of children. These actions are not unequivocal evidence of moral turpitude, but are associated with the emotional elements of consciousness. One large group of children, which supplies perhaps the majority of juvenile delinquents, is that of the unstable children, who exhibit emotional instability combined with normal or quasi-normal intellectual capacity. Again, juvenile delinquency may be due to the love of adventure, fantasy-building, or to the limited opportunities in town life for self-expression of the normal interest of youth.

These problems of mal-adjustment and mal-adaptation amongst children are of the greatest sociological importance, for it is the experience of childhood that gives colour to the whole emotional content of the outlook on life and the resulting behaviour of the adult.

The dementia præcox complex is full of interest in this connection, though this condition rarely manifests itself sufficiently early to come within the purview of the school medical officer. With the medical supervision of secondary and continuation schools contemplated by the Elementary Education Act, 1918, doubtless these cases will more frequently be met with.

Another field of inquiry which has remained almost entirely untilled is the study of the emotional reactions and anomalies of the affective processes which are exhibited by the feeble-minded as a class. For example, it does not appear to have ever been pointed out how extraordinarily closely these are paralleled by the psychological characters exhibited by an unorganised crowd. Thus the description of a mob given by McDougall⁽⁵⁾ might be applied equally well to the characters in general of the feeble-minded :

“Excessively emotional, impulsive, violent, fickle, inconsistent, irresolute, extreme in action, displaying only the coarser emotions and less-refined sentiments, extremely susceptible, careless in deliberation, hasty in judgment, incapable of any but the simpler and imperfect forms of reasoning, devoid of self-respect, etc.”

Another interesting problem which is more especially brought before the school medical officer is that of the extraordinary moral changes which not infrequently follow an attack of encephalitis lethargica. Such children cannot be classified as mental defectives in the ordinary acceptance of the term and cannot be dealt with under the Mental Deficiency Act ; yet they often prove a nuisance at school and at home.

These examples will serve to show how diverse are the questions which arise in connection with the psychological development of children.

How, then, can these demands for research and investigation best be met?

One of the most urgent needs of the present day in England is the establishment of psycho-educational clinics, the scope of which should be sufficiently wide to include the examination of all children presenting abnormalities of educational progress or of conduct. Every child charged at a court with an offence should receive a thorough psychological examination at the hands of a trained examiner. It is stated that new legislation would be necessary to compass this end, but that is not an insuperable difficulty when once public opinion has been educated to the need. The results achieved in America along these lines deserve consideration. In a recent publication by the U.S. Department of Labour, covering the year 1918, it is stated that in 145 children's courts there were mental examinations in clinics organised under the following heads:

- | | |
|---|----|
| 1. Court clinics, as part of the court organisation | 15 |
| 2. Clinics or examiners connected with institutions (usually
State institutions for insane or feeble-minded) | 46 |
| 3. Special clinics maintained by the county or city | 4 |
| 4. Clinics connected with universities, colleges or examiners
associated with the psychology departments of these
institutions | 20 |
| 5. Laboratories or examiners connected with the elementary
schools for the study of abnormal or unusual children | 14 |
| 6. Various, reported as "experts," <i>i.e.</i> , "psychiatrists,"
"psychologists," "alienists," with no indication of their
connection with the court in question | 31 |
| 7. School teachers, probation officers, school nurses, mental
hygiene societies, etc. | 15 |

The most complete scheme is that of the State of Massachusetts, in which five courts send their children for examination to the Waverley Colony for the feeble-minded.

In a scheme of psychological clinics of this character, the point of prime importance would be the choice of the staff. While I hold no brief for the school medical service, and do not claim that the school medical officer is by his mere office necessarily fully-equipped for dealing with these cases, yet I am convinced that the provenance of the school is the best training-ground, and the only one where the essential experience in both the educational and sociological aspects of mental defect can be gained. Neither the asylum, the prison service nor hospital practice seem to afford the same opportunity for the acquisition of a broad basis of sound knowledge of the normal as well as of the abnormal psychological states. But much more specific training in the methods of psychological research is necessary for all who intend to

devote themselves to this branch of medicine. A suggestion has been made that a distinctive diploma should be instituted for the school medical service. The multiplication of new diplomas in special branches of medicine is greatly to be deprecated, and is, in my opinion, against the real interests of the profession as a whole. School medical officers should be encouraged to take the Diploma in Psychological Medicine, which could be extended to meet their special needs, and should include more of sociological science than has been the case hitherto. With such training added to and enriched by the experience in child-psychology which comes in the course of his duties, no one should be better equipped than the school medical officer.

There is at the present time a strong additional reason why insistence should be laid on this point. Much research is being carried on by the application of psychological methods to problems of education generally, and there is a marked tendency to regard the problem of backwardness and retardation as a purely pedagogic question in which the teacher rather than the medical officer is concerned. If we neglect to provide the specialised training for the production of psychologists of this type, we cannot have grounds of complaint if this branch of investigation is captured by the pedagogic side of educational administration. There is an added danger from another direction. The popularity of psycho-analysis and the "New Psychology" so-called is tempting many persons, both medical and lay, whose knowledge of psychology is extremely slender, to attempt psycho-analytic methods in dealing with children. The results may not be so serious if the agent is a practitioner of medicine, for he will come to recognise his own limitations, but if psycho-analysis is undertaken by persons unqualified to distinguish between the organic and the functional, between the true and the false inferences of inductive logic, disaster is certain. This is a trite statement of a truth long recognised but often forgotten. As Horace⁽⁶⁾ tersely puts it:

" Abrotonum aegro

Non audet, nisi qui didicit, dare ; quod medicorum est
Promittant medici : tractent fabrilis fabri."

(²) Earlswood, 1847; Colchester, 1859; Starcross and Royal Albert, Lancaster, 1864; Knowle, 1868.—(³) *Lancet*, April 23rd, 1921.—(⁴) *Journal of Psychology* xi, pt. 2, p. 188.—(⁵) *The Group Mind*, p. 45.—(⁶) *Epist.* ii, 1, 116.

Occasional Note.

The Croonian Lecture at the Royal Society (¹).

RELEASE of function in the nervous system was the subject selected by Dr. Henry Head for this lecture delivered on May 5th, 1921. In

(¹) *Proceedings of the Royal Society*, B, vol. xcii, 1921.

his address Dr. Head draws attention to the law laid down by Hughlings Jackson that destructive lesions never cause positive effects, but induce a negative condition, which permits positive symptoms to appear. He points out that this doctrine in its specific application to certain phenomena of hemiplegia was widely accepted, especially in England; but it was not generally applied to the phenomena of nervous disease, and it is still the custom to attribute to "irritation" most of the excessive reactions produced by organic disease or injury. It not infrequently happens that an observer of unusual penetration and genius formulates a conception the truth of which cannot be grasped by his contemporaries, and it is only after many years that its true significance and importance begin to gain recognition. This is true in relation to Hughlings Jackson's conception that the functions of the nervous system are integrated on evolutionary principles; and it is largely due to Dr. Head that the importance of this conception for the proper understanding of the phenomena of nervous disease is now gaining recognition. The arduous experimental and clinical researches upon which Dr. Head bases his neurological teachings are now familiar to neurologists and psychiatrists, and a useful *résumé* of his views will be found in the Croonian Lecture. It is there shown that in the gradual evolution of function the reactions of the lower centres have been changed to suit fresh conditions; that such readjustment involves modification or suppression of older modes of response; and that removal of a higher and dominant mechanism permits primitive and lower mechanisms to appear. Dr. Head confines his observations in this lecture to the partial functions of the organism; but his biological and evolutionary conceptions may suitably be applied to the psychological problem of behaviour or adjustment at the social level. Perhaps the most systematic attempt to do so is that made by Dr. Rivers in his interesting volume on *Instinct and the Unconscious*. It may here be observed, moreover, that Hughlings Jackson himself endeavoured to apply his principles in the interpretation of disordered mental states, and that Dr. Mercier was one of the first psychiatrists to follow his teachings in this respect.

Hughlings Jackson was a member of the Medico-Psychological Association, and contributed a number of articles to the Journal at the time Savage and Dr. Hack Tuke were editors. Perhaps the most important was the paper on "Remarks on Evolution and Dissolution of the Nervous System," and it will be found a most pleasing and instructive task to read this article through, in conjunction with that recently delivered by Dr. Head at the Royal Society.

Dr. Head has previously suggested that one reason Hughlings Jackson's views bore no fruit during his lifetime was the peculiarly difficult style in which they were written. He was so anxious not to

over-state his case that almost every page is peppered with explanatory phrases and foot-notes, so that the generalisation can scarcely be distinguished from its qualifications. The paper to which reference has been made exhibits these peculiarities in style, but its contents have an added interest to the reader of the present day, as they show how largely Hughlings Jackson anticipated the direction of modern neurological thought.

Part II.—Reviews.

The Sixth Annual Report of the Board of Control for the year 1919.

History of the Asylum War Hospitals in England and Wales. Report to the Secretary of State for the Home Department by Sir Marriott Cooke, K.B.E., M.B., and C. Hubert Bond, C.B.E., M.D., D.Sc., F.R.C.P., Commissioners of the Board of Control.

The year 1919 will be memorable in the annals of the Board of Control as the one during which it severed very largely its connection with the Home Office and Local Government Board and became attached to the Ministry of Health pursuant to the Ministry of Health Act, 9 & 10 Geo. 5, Cap. 21, the Order in Council being dated June 25th, 1919. The transfer was a complete one with the exception of matters "relating to aliens and criminal lunatics and defectives, and to certain powers of ordering special inquiries which it has been thought proper to leave in the hands of the Home Secretary." We venture to hope that it may indicate or foreshadow a closer co-operation between psychiatry and other branches of the profession, and that we are also right in regarding it as a recognition of the great importance psychological medicine plays in the matter of the health and social well-being of the people. The danger of the change is that this hitherto semi-independent body may degenerate into a mere appendage of a Ministry and thus become subjected to the ever-changing political situation. This will depend a good deal on the constitution of the Board and the future appointments made to it. Lunacy policy henceforth will not rest, as it were, almost entirely with the Board and reflect the considered views of the Commissioners, but there will now be new factors in the situation—the views of the Minister of Health and of the *personnel* of his Ministry. We trust, however, that the Board will under the altered conditions rather be strengthened than otherwise in the exercise of its functions as custodians of the welfare of the insane and mentally deficient; and that there will continue to be a considerate and open ear to any views expressed by our Association.

LUNACY.

Number of notified insane.—There was, during the year under review, a small increase of 61 in the number of insane persons under care. This was mainly the outcome of the lowered death-rate, though

there was an increase in the number admitted to care. The total number of notified insane in England and Wales was on January 1st, 1920, 116,764. The number of mental and nervous cases in military hospitals was 1,600—a decrease of about 2,000 on the previous year's figures. In the county and borough asylums the decrease during 1919 was replaced by an increase of 474, which was entirely as regards male patients, the females actually decreasing by 259. In 1916 only 3 *per cent.* of pauper patients were transferred to the private class; during 1918 it rose to 14 *per cent.* and practically maintained this level during 1919, being 13 *per cent.* This increase has been due to the service patients being classified as private patients.

There has been a steady fall in the number of private patients in registered hospitals, licensed houses, and under single care, while in county and borough asylums the increase has been remarkable, and has risen from 13·2 *per cent.* in 1889 to 56·5 *per cent.* at the beginning of 1920. Although no doubt there are many explanations for this change of affairs, yet it cannot be said to support the attitude adopted by a section of the public as regards the treatment of patients in the county and borough asylums.

Journalism and the treatment of the insane.—In our review of a previous report (vol. lxvi, p. 288) we commented on this matter, and we note with regret that some writers for the Press are still very active in this direction. Wild stories, with often only a semblance of truth, appear to find easy credence, and after being written up into sensational articles are served to the public as established facts, and the closest inquiry demanded. How long, we ask, is progress in the enlightened treatment of the insane to be hindered and discouraged (for such is the effect) by such irresponsible journalism? As a rule the name of the institution or doctor is not mentioned. Neither the Board of Control nor the public institution concerned if named can prosecute, not being industries or establishments run for profit. Public inquiries cost time and money, and as regards the doctor, he would probably find great difficulty in initiating legal proceedings. It is not that those whose lot it is to undertake the care of the mentally afflicted claim immunity from criticism, but it is only fair to any public service that some inquiries should be addressed to those concerned before inviting public condemnation; some regard should also be paid to the relatives and friends of patients before creating an atmosphere of anxiety and uneasiness.

Admissions, discharges and deaths in 1919.—The following table conveys these particulars :

Total admissions, 22,891 (males, 10,831 ; females, 12,060).

First admissions, 19,328.

Discharges "recovered," 7,286; recovery-rate on total admissions, 31·83 *per cent.* (males, 24·99 *per cent.*; females, 37·97 *per cent.*).

Discharges "not recovered," 3,195.

Total deaths, 12,069; death-rate, on daily average number resident.

12·55 *per cent.* (males, 14·42 *per cent.*; females, 11·12 *per cent.*).

The number admitted showed a 5·3 *per cent.* increase on the figure for 1918, and though the recovery-rate is still a little below normal, yet

there is a marked increase as compared with the previous year. The small number of patients discharged "relieved" or "not recovered"—only 14 *per cent.* of the admissions—shows that little advantage is taken of discharge under Section 79 of the Lunacy Act of 1890. This matter has been receiving some attention of late, following the attention drawn to this method of discharge by a question in Parliament, and the subsequent action of the Board of Control, who issued a circular on the subject. Medical superintendents are not in a happy position as regards the discharge of "unrecovered" persons. From time to time there appear in the press alarmist articles complaining of the iniquitous way patients, either unrecovered or only half cured, are discharged from mental hospitals—a source of danger to the public, especially women and children, and free to reproduce their species. At other times complaints about sane people being admitted, or unjustly and illegally detained, are voiced, accompanied by sweeping condemnation, etc. Blame is thus dealt out with equal generosity whether patients are discharged or not. It is not likely, therefore, that any action, the outcome of the Board's circular-letter, will satisfy everybody. As regards recovered patients, discharge from hospital care is a medical problem, admittedly often one of some difficulty; but when a patient is honestly thought by the medical superintendent to have recovered, discharge must follow. In the case of an "unrecovered" person the question of responsibility for the patient's future is acute. Section 79 of the Lunacy Act, 1890, is little or no safeguard to the public. The patient, on discharge under this section, is immediately legally a free person, and cannot be controlled against his wishes without recertification. Undoubtedly the mental hospital authorities are open to be blamed for any untoward incident happening subsequently, for their action is a voluntary one in these cases, and not an obligatory one, as in the case of a "recovered" person. The position in this matter is much more clear as regards patients of the private class, and we are almost tempted to recommend that rate-supported patients should be dealt with in the same manner. It would at least have the advantage of making the position absolutely clear, and throwing the main burden of responsibility for the detention of the insane on the public, and removing one of the numerous bases of complaint. It could then be said that no patient was detained under certificate in any institution against the wishes of the relatives unless he was dangerous and unfit to be at large.

We recognise, however, that a mental hospital has higher functions than custodial care of the chronic insane, and we see no objection, granted it is acceptable to the public, to chronic cases who, as far as can be seen, are neither dangerous to themselves or others, being discharged to the care of their relatives and cared for in suitable home surroundings.

On the contrary, it would be advantageous, for the accommodation thus freed might in many hospitals be adapted for the care of acute cases and the provision of segregation for dysentery, tuberculosis, etc.

The same object could perhaps be better attained by amending the procedure which renders the English law regarding "board-out of patients" cumbersome and impracticable, and thus make it possible

to adopt in this country some system of family care like that so successfully carried out in some districts of Scotland.

The whole question, however, of the discharge of patients, especially the method of calculating the recovery-rate, is well worthy of the Commissioners' consideration. A recovery-rate which is inclusive of irrecoverable conditions such as imbecility, epilepsy, general paralysis, cerebral softening, etc., is a flat contradiction of itself and quite valueless medically and sociologically. Such being the case, we can see no advantage in searching for any guidance or lesson in the figures regarding the recovery of patients reported by the Commissioners year by year.

Mental hospital staffs, weekly hours and wages.—A résumé is given of the steps taken by certain county authorities as regards the hours of duty and rates of pay of nurses and other employees in mental hospitals. The Board doubts "whether the increase of the nursing staff, and the constant changing of *personnel* due to the shorter hours of work, will conduce to the well-being and comfort of the patients." So do many people, but the unsympathetic and prejudiced attitude of the public generally to mental hospital nurses was not calculated to encourage the continuance of their altruistic attitude as regards hours of duty, especially in the case of married male nurses with family ties. Small blame be to them, therefore, if, starved of the appreciation so bountifully bestowed on other and less trying branches of the nursing profession, they ask for fewer hours and more pay. We do not doubt but that a healthier, less institutionised and better-paid nursing staff will be a valuable asset in the treatment of mental patients, and we derive some comfort in this reflection.

Mortality in county and borough mental hospitals.—The report again subjects the asylum death returns to a close scrutiny, and shows that while the death-rate for 1919 as compared with that for 1918 fell from 20·3 to 12·9, it was still 3·3 above the average 1910-14 rate. Of the four great causes of death, *viz.*, enteric, influenza, dysentery, and tuberculosis, three may be regarded as preventable diseases. There was a reduction during the year in the number dying from all four causes, especially influenza and tuberculosis. The close relationship between influenza and pneumonia was evident by a decrease of 55·2 *per cent.* in the deaths from the latter disease. We are also persuaded that there is a similar relationship between influenza and tuberculosis, and that the pandemic of the former disease which occurred in 1918 and in a milder form during the spring of 1919 will account for not a few of the cases of tuberculosis which have become evident since, and that its effect will continue to be felt in the tuberculosis-rate for some years to come. The lowered mortality-rate which followed the conclusion of the war is proof conclusive that the alarming rise in the number of those dying in mental hospitals during 1917 and 1918 was due to unusual administrative and economic conditions.⁽¹⁾ At the same time the continued heavy incidence of enteric, dysentery, and tuber-

(1) It is rather surprising that the higher mortality during the war was not considered in relationship to the duration of the mental disorder. The chronic insane would be especially liable to succumb to unfavourable administrative and economic conditions owing to the lowered resistance to disease, due to the decay of trophic functions which accompanies brain degeneration.

culosis remains a reproach to mental hospital administration. The Commissioners very rightly lay emphasis on the fact that these are preventable diseases. In a previous report certain recommendations were made to lessen the opportunities of infection in mental institutions, which no doubt have received practical attention and should show their effect in due course. Opportunity is taken in this report to urge mental hospital authorities to effectively segregate those suffering from tuberculosis, to encourage open-air life, and include in the dietary a sufficiency of food accessories such as animal fats—notably milk and butter, the lack of which increases the vulnerability to this disease.

MENTAL DEFICIENCY.

The section devoted to mental deficiency occupies no less than 33 of the 84 pages of the report proper. There was a net increase of 1,443 mentally defective patients as compared with the previous year, bringing the total number under care up to 10,129. Of these no less than 7,011 were in certified institutions and 2,100 in Poor Law institutions (approved under Section 37 of the M.D. Act of 1913).

Certified institutions.—During the year 1,358 persons were admitted to certified institutions. Of these 446 were low-grade imbeciles and idiots, 829 were high-grade feeble-minded and 83 were moral imbeciles. The high proportion of high-grade defectives was no doubt due to the lack of special accommodation for the low-grade defectives, the majority of the latter being still retained in asylums and workhouses and not yet dealt with under the Mental Deficiency Act. The administration of these institutions has at least one common character with mental hospitals, *i.e.*, the constant effort which is necessary to prevent the housing, clothing, and custodial welfare generally of the patients assuming a dominant position, and not mental treatment. Proper mental treatment in these institutions, as in the mental hospitals, depends in the first place on classification and the proper grouping of the patients. The Commissioners have reason to be satisfied regarding the way the physical well-being of the patients in certified institutions is cared for, but, although some progress has been made as regards the mental and manual training, much remains to be accomplished in these respects. The history of the mental hospitals affords abundant proof that the Commissioners are correct in saying that “activity means mental progress, physical improvement, and contentment; idleness the reverse, with discredit to the whole work.”

It is interesting to note that no less than 82 defectives suffered during the year from dysentery (colitis), one fatally. All occurred, however, in two of the older establishments—Royal Earlswood and the Royal Eastern Counties Institutions. There were also 195 cases of tuberculosis.

We cannot help being impressed with the remarkable similarity there is between the work in these institutions and in the mental hospitals. Mental disease and mental deficiency are merely branches of the same subject, and so interwoven that any attempt to treat them separately is bound to fail in the long run. The same authority governs them both, and there should be a close co-operation and, as far as possible,

unity in professional work. This is the attitude adopted by our Association both as regards its membership and its nursing certificate. It is to be hoped that Parliament, in future lunacy and mental deficiency legislation, will have due regard to this fact, and render possible a single service operating in two directions, and not, as at present, two separate services not interchangeable. The mental deficiency service has nothing to gain but plenty to lose by neglect of the knowledge and experience, both administrative and medical, of the mental hospitals. Sentiment and prejudice should have no place in the management of public affairs, only cold and established matters of fact; and one thing is certain, namely, that lunacy and mental deficiency are one and the same problem, which should be tackled in the same spirit, with the same ideals, and the solution of which will be more quickly found with a unity of effort and a community of thought and experience.

Ascertainment.—The Commissioners again complain that many local authorities have not yet seriously undertaken the ascertainment of the numbers and classes of defectives in their respective areas. It is very necessary that this work should be undertaken in order to obtain an estimate of the numbers for whom provision will be necessary as a prelude to formulating schemes for the consideration and approval of the Board. However, from the returns already made, the Commissioners think that any local authority would be safe in estimating that accommodation in the near future will be required for 1 per 1,000 of the population. The Commissioners hold that large institutions are to be preferred from the point of view not only of capital and maintenance charges, but also of efficiency, organisation and classification. For this purpose co-operation between local authorities will frequently be a matter of importance, the financial aspect of which is being considered by the Law Officers of the Crown.

A meed of well-deserved praise and thanks is extended to the central and voluntary associations for their continued assistance during the year.

RETIREMENT OF SIR FREDERICK NEEDHAM AND MR. SHADWELL.

The notification of the retirement of these Commissioners was received in the mental hospital world with great regret. Sir Frederick Needham was undoubtedly for many years the outstanding figure in the Board's *personnel*, a man greatly respected and trusted, who always knew his own mind, and was never afraid to express it, and often, too, with a directness which at once commanded respect and close attention. He was a critical inspector of our mental hospitals, did his work thoroughly, and from him a word of commendation was highly valued. Nobody who met him, either at the mental hospitals or at the Board's offices, could help but be impressed with his extensive knowledge of lunacy matters generally, his grasp of detail, and his brisk mentality. Although firm and even severe when occasion called, yet he was always kindly and helpful, especially to young superintendents and medical officers. His passing from the Board will be a great loss to us all.

Mr. Shadwell also will be missed, especially by his immediate colleagues, who had the highest respect for his legal knowledge. His calm and placid demeanour was no index to his alertness and mental activity. Though not given to many words, nothing as a matter of fact escaped his observation on his visitations to the mental hospitals, on which occasions his sound common-sense, especially when conversing with querulous patients, was much appreciated and valued. Our best wishes for many happy years of freedom from the cares of public life go with them both.

THE ASYLUM WAR HOSPITALS.

The account of the conspicuous part played by the asylum war hospitals in the care of our sick and wounded during the war is a record of achievement which the mental hospital world in general can well be proud of. Sir Marriott Cooke and Dr. C. Hubert Bond had a difficult task allotted them, calling for an abundance of tact and patience, which fortunately both these gentlemen possess in an unusual degree. Not only did they act as the intermediary between the Government and local asylum authorities, but, what is more trying, they were used as a "buffer state" when contention arose—a convenient dumping-ground for complaints not thought advisable to allocate to their rightful quarters. Although great credit is due to these Commissioners for the initiation and success of the vast undertaking now happily concluded, yet they would be the last to belittle the part played in it by the asylum committees, not only those directly associated with the war hospitals, but throughout the country. The important duties performed by the committees of management as regards the war hospitals were essential to their successful administration and admirably carried out, but the suspension of the activities of these institutions as mental hospitals threw more work and greater responsibility on the remaining mental hospitals—a rôle not so likely to catch the public eye. These remarks apply also to the permanent staffs of the county and borough mental hospitals, for indeed upon them fell the main burden of the undertaking.

Two facts prominently brought out in our opinion by this report are the comparatively little alteration which was found necessary in the administration of the mental hospitals to bring them into line with the general hospitals, and the high order of the medical, surgical and nursing attainments of the mental hospital *personnel*. The success of the latter, when suddenly called up to treat and nurse general cases, demonstrates the importance of being able to treat the individual as well as the malady suffered from. Let us hope that the co-operation which became necessary between the several branches of the medical and nursing profession will result in a greater appreciation of the value of mutual understanding and esteem, and pave the way for the entry of psychiatry in its widest sense into the full brotherhood of medicine.

As blue books and reports are apt to be hidden away in course of time and not readily found, it is wise that our Journal should preserve in its pages a brief summary of the subject-matter of this report :

Number of Mental Hospitals used as War Hospitals.

For sick and wounded cases only	14
For mental and nervous cases only	7
For both the above	3
	<hr/>
Total	24

Number of Beds Provided.

	Totals.
Original accommodation	24,088
Additional beds	2,511
In huts	1,179
Under canvas and in camps	1,928
Emergency beds	1,540
	<hr/>
Grand total	31,246

	Sick and wounded cases.	Mental and nervous cases.	Total.
Admitted	444,509	38,440	482,949
Died	2,972	286	3,258

Names of Mental Hospitals and Corresponding Names as War Hospitals.

<i>Name of Mental Hospital.</i>	<i>Name of War Hospital.</i>
West Sussex County Asylum, Chichester.	Graylingwell War Hospital.
Lancashire County Asylum, Winwick, Warrington.	The Lord Derby War Hospital.
London County Asylum, Horton, Epsom.	Horton (County of London) War Hospital.
West Riding of Yorkshire Asylum, Wadsley, Sheffield.	Wharnccliffe War Hospital.
Bristol County and City Asylum, Fishponds, Bristol.	Beaufort War Hospital.
Newcastle-upon-Tyne County and City Asylum, Gosforth, Newcastle-upon-Tyne.	Northumberland War Hospital.
Norfolk County Asylum, Thorpe, Norwich.	Norfolk War Hospital.
Lancashire County Asylum, Whalley.	Queen Mary's Military Hospital.
Lancashire County Asylum, Whittingham (Annexe).	Whittingham Military Hospital.
Cardiff City Asylum, Whitchurch, Cardiff.	Welsh Metropolitan War Hospital.
Birmingham City Asylum, Rubery Hill.	1st Birmingham War Hospital.
Birmingham City Asylum, Hollymoor.	2nd Birmingham War Hospital, subsequently Birmingham Special Military Surgical Hospital.
Northampton County Asylum, Berrywood, Northampton.	Northamptonshire War Hospital.
Middlesex County Asylum, Napsbury, St. Albans.	County of Middlesex War Hospital.
London (Manor) County Asylum, Epsom.	Manor (County of London) War Hospital.
Hants (2nd) County Asylum, Park Prewett, Basingstoke.	No. 4 Canadian General Hospital.

<i>Name of Mental Hospital.</i>	<i>Name of War Hospital.</i>
Portsmouth Borough Asylum, Milton, Portsmouth.	United States Army Base Hospital 33.
Notts County Asylum, Radcliffe-on-Trent.	Notts County War Hospital.
Moss Side State Institution, Maghull, Liverpool.	Moss Side Military Hospital.
Middlesex County Asylum, Wandsworth (Detached Block).	Springfield War Hospital.
Maudsley Hospital, Denmark Hill, S.E.	Maudsley Neurological Clearing Hospital.
Oxford County and City Asylum, Littlemore, Oxford.	Ashurst War Hospital.
London County Ewell Colony (for Epileptics), Epsom.	Ewell (County of London) War Hospital.
Gateshead Borough Asylum, Stannington, Northumberland.	Gateshead War Hospital.

Insanity and Mental Deficiency in Relation to Legal Responsibility.

By WILLIAM G. H. COOK, LL.D.Lond., Barrister-at-Law. London: George Routledge & Sons, Ltd., 1921. Demy 8vo. Pp. xxiv + 192. Price 10s. 6d. net.

In this little book of less than 200 pages, which was accepted as his thesis for the degree of Doctor of Laws in the University of London, Dr. Cook gives an interesting account of the legal principles which relate to the civil responsibility of the insane. He points out that since *McNaughten's* case in 1843 certain rules have been laid down for the guidance of the Courts in criminal matters when insanity is pleaded, but that there are no corresponding and binding directions in relation to civil liability; and he quotes Lord Esher, M.R., who in the case of *Drew v. Nunn* in 1879 stated that he found that the law relating to the civil responsibility of lunatics "stood upon a very unsatisfactory footing"—a condition which, it may be remarked in passing, that learned judge did much, before he left the Bench, to improve.

Dr. Cook expresses the opinion that the knowledge of insanity has so appreciably increased during the past thirty years that it is now possible to give a definition of the term which is both comprehensive and complete. Accordingly he devotes his first chapter to the definition and classification of insanity in accordance with modern views.

The chapter is complicated by references to the Mental Deficiency Act, 1913, which really has very little to do with the matter, except perhaps to justify the title of the book. But the importation of the words "mental deficiency" in any but their most general sense is likely to confuse. One of the chief reasons for passing that Act was to extend the powers of detaining idiots and imbeciles given by the Lunacy Acts to classes of persons who could properly be described as defective but not as insane, their shortcomings being in fact due not so much to lack of intelligence as to failure to adapt themselves to ordinary social conditions. There would be great difficulty in applying the principles of legal irresponsibility to defectives who are merely feeble-minded or moral imbeciles but not insane.

There can, however, be no question that the more reasonable views as to the responsibility of the insane, whether criminal or civil, which

prevail to-day are very largely due to the better knowledge possessed by the medical profession, and shared to some extent by the public in general, of the characteristics of mental disorders.

It cannot be too often repeated that insanity is a legal, not a medical conception. As Prof. Geo. M. Robertson has recently pointed out, the law is not concerned with disease but with conduct: when conduct is so affected by disease of the mind that the patient is unfit to enjoy full liberty, then—and not till then—arises the condition known as insanity.

The legal presumption is that everyone is responsible for the natural consequences of his acts. To rebut this presumption on the ground of insanity, the person whose act is in question must show that his mental disorder was such that he was unable to understand the nature of the act and its consequences to himself and others. This was definitely laid down by Lord Esher, M.R., in the well known case of *Hanbury v. Hanbury* decided in 1892.

The civil responsibility of the insane has to be studied historically. When so treated, as Dr. Cook shows, many of the apparent anomalies disappear, and remarkable evidence is forthcoming of the adaptability of the common law to novel circumstances and changed conditions. At one time the view prevailed that all lunatics were incapable of any voluntary act, that the mind was one and indivisible, so that partial insanity was impossible: then, too, there was the extraordinary legal doctrine that a man should not be allowed to stultify himself by pleading his own mental incapacity; and even more remarkable is the revolt against the idea that the contracts of lunatics must of necessity be void, based on the false analogy of the contracts of infants. While it is true to say that all infants are under a certain age, it is not true to say that all lunatics are irresponsible.

These long-held doctrines have now disappeared, not by direct legislation, but as the result of decisions of the judges, who have been able from time to time to absorb the wider medical knowledge on these matters, and to lay down principles more in accordance with modern ideas. In the process, however, there have been of necessity many conflicting decisions and consequently considerable confusion of thought, which have given rise to some unmerited criticism.

As regards torts, from the earliest times lunacy did not excuse a man from liability to pay pecuniary damages in respect of a civil wrong committed by him, such damages not being a penalty but a satisfaction for injury sustained. In conformity with Lord Esher's ruling already quoted, Dr. Cook takes the various classes of tort known to the common law and applies the tests suggested. There is no difficulty in deciding in ordinary cases whether a person alleged to be insane was capable of fraud, malice, negligence or any other of the essential elements of the tort committed. If so capable, he will be held to be liable. There remains, however, the difficult case not covered by Lord Esher's ruling, *viz.*, when a lunatic who is so insane as to be incapacitated totally from knowing what he was doing commits a trespass and causes damage. Dr. Cook thinks that unsoundness of mind of such a degree as to prevent the defendant from knowing what he was doing would be a valid defence to an action. If this is so, great hardship may be inflicted on an innocent party who has suffered damage by another's illegal

act, which he was powerless to prevent, and for which he cannot obtain pecuniary compensation. Happily cases of this sort are rarely contested in the courts; probably when they occur they are settled more equitably without litigation.

The liability of the insane on their contracts presents many features of interest. The rule originally was that the contract of a lunatic is void; then the rule of procedure was introduced that no man may stultify himself by pleading his own incapacity as was held in *Beverley's* case decided in 1603; this was often found to be very inequitable, and the tendency of the common-law judges in the first half of the nineteenth century was to ignore the rule when its strict application would have been contrary to the principles of natural justice. In the year 1849 it was held, in the case of *Molton v. Camroux*, that unsoundness of mind is a good defence to an action upon a contract, provided that due proof can be given that the defendant lacked capacity to contract, and that the plaintiff either knew it or would have known it if he had exercised ordinary care and observation. The insistence on the absence of knowledge of the mental incapacity was probably a concession, Dr. Cook thinks, to the old doctrine that every person dealing with a lunatic with knowledge of his incapacity was deemed to perpetrate a fraud upon him which would avoid the contract.

This decision was approved and followed in 1892 in *The Imperial Loan Co. v. Stone* in the Court of Appeal, Lord Esher, M.R., in his judgment declining to recognise that there existed any difference in the law in cases of this sort between executed and executory contracts.

The law of England on the subject at the present time therefore is that contracts of the insane are under certain circumstances voidable but not void.

Dr. Cook in an ingenious argument contends that both these cases were wrongly decided and would not be upheld at the present day by the House of Lords. His criticism seems mainly to be based on the fact that *Molton v. Camroux* was decided on the authority of three older cases which referred only to "necessaries," the liability of the lunatic to pay for which is called an "*obligatio quasi ex contractu*," thereby showing that no direct contract with him was possible; and that in *The Imperial Loan Co. v. Stone* no reference was made to the case of *In re Rhodes*, *Rhodes v. Rhodes* (1890), in which the Court of Appeal held that a lunatic could not himself contract in express terms.

For the present, however, the law remains as laid down in *Molton v. Camroux*, a decision which has now been acted on for more than half a century.

One of the best chapters in the book is that in which the testamentary capacity of the insane is dealt with. Full reference is made to the leading case of *Banks v. Goodfellow* (1870), in which it was laid down by the Court of Queen's Bench that partial unsoundness of mind, not affecting the general faculties and not operating on the mind of a testator in regard to testamentary dispositions, is not sufficient to render a person incapable of disposing of his property by will. The court consisted of Cockburn C.J., Blackburn, Mellor and Hannen JJ., and their judgment gave the quietus to the doctrine of the oneness and

indivisibility of the mind. Where there is partial unsoundness of mind each case has to be dealt with upon its own merits, the real question being whether a testator at the time of making his will had a sound and disposing mind and memory. Such a condition need not be incompatible with partial insanity or the existence of delusions.

On the subject of "The execution of legal documents other than wills," Dr. Cook states that the practice followed in the asylum under the control of the London County Council is to allow certified lunatics to execute deeds and similar documents with the consent of the visiting committee, provided that the medical superintendent certifies that, at the time of the execution of the document, the lunatic understood the nature and purport of his act. This practice, if correctly reported, is contrary to the advice given in the circular issued to all superintendents of institutions in 1896 by the Board of Control, who are strongly opposed to the execution of any legal documents with the exception of wills by patients detained under reception orders as insane. They except the case of a will or codicil, because testamentary dispositions made during lucid intervals by persons of unsound mind are held to be valid, and are always open to be contested before being rendered operative by probate. The Board think that, if it becomes necessary to deal with the property or income of a person of unsound mind while under detention as such, resort should be made to the machinery provided by the Lunacy Acts or other statutes applicable to the circumstances.

* In two pages of Appendix (II) Dr. Cook, somewhat unnecessarily for the purposes of his book, makes the following suggestions for the reform of lunacy and mental deficiency administration: (1) the abolition of the laws of settlement of insane paupers, whose maintenance should be, he suggests, a national charge; (2) the abolition of the visiting committees of the County and County Borough Councils as set up by the Lunacy Acts; (3) that the duty of dealing with the certified insane and mental defectives, as well as the "borderline" cases, should be placed upon a central authority directly responsible to Parliament; (4) that the Board of Control be made a sub-department of the Ministry of Health, and be given statutory powers to deal with all cases of mental disorders, including their certification, segregation and treatment.

So drastic and bureaucratic a scheme is not likely to be viewed with favour by any responsible administrator.

A. H. TREVOR.

Addresses on Psycho-Analysis. By J. J. PUTNAM, M.D. With a Preface by SIGM. FREUD, M.D., LL.D. London: Allen & Unwin, Ltd. (for the International Psycho-Analytical Press), 1921. Medium 8vo, pp. x + 470. Price 12s. 6d.

This is the first volume of the International Psycho-Analytical Library, edited by Dr. Ernest Jones, and well produced in Vienna for the English-speaking world.

The Harvard Professor of Neurology, who died three years ago, seems to have been regarded, and quite reasonably, by American psycho-analysts as their greatest asset. The descendant of an old New England Puritan family (springing, as another eminent member of this

family told the present writer, from Puttenham in Buckinghamshire), and personally of the highest character and much charming amiability, he stood professionally in the first rank in his own specialty of clinical and pathological neurology, a field in which he was an active pioneer, and an energetic worker who carried on much original research, became widely known by medico-legal duties in regard to the traumatic neuroses, and later by a natural transition turned his attention to clinical psychology. That a man in so commanding a position should possess the flexibility of mind and the moral courage, when well over sixty years of age, to grasp and embrace an entirely new and unfashionable doctrine and to spread it abroad with eager, though discriminating enthusiasm, was certainly remarkable, and psycho-analysts may well be proud of such an adherent.

That, indeed, Putnam added anything of value to psycho-analysis, this volume, in which all his contributions to the subject are brought together, entirely fails to show. What he would have liked to add was a compensatory balance to what he regarded as the unduly narrow and material character of the doctrine. He thought it failed to allow sufficient play to morals and philosophy: "Freud fails to do justice to the claims of philosophy and religion as genuine modes of approaching and expressing the truth" he wrote in the last of these papers just before his death. He tells us that Freud had said to him, "with impressive earnestness," in reply to an objection of this kind, that it is *knowledge*, and not moral estimates, we need. One may agree with Putnam in asserting the importance of philosophy and morals, and in believing that there is more philosophy implied in Freud's doctrines than he himself realises. Yet Freud's effort to maintain, so far as possible, a strictly scientific attitude seems sound. To mix up science with ethics is not good either for the one or the other. Putnam himself had been compelled to throw courageously aside various prejudices, philosophically or ethically rooted, before he could accept the illumination which Freud offered.

It is probable, indeed, that Putnam's inability to throw off such prejudices more completely accounts for the ineffectiveness of his work as a psycho-analyst. Undoubtedly the new views were an immense help to him. His great experience and the insight obtained by long practice enabled him by their light to gain a fresh vision without detailed and elaborate psycho-analysis. Such a method was not natural or easy to him. Moreover, while he sanely accepted the fact of sex even in its infantile manifestations, he was a little shy of some of the implications of that acceptance, and slurred vaguely over much that it would have been better to state more precisely. The fragments of histories presented in this volume are, in most cases, not satisfactory, and sometimes scarcely convincing.

The real value of this book is as an introduction to the subject and doctrines of psycho-analysis, specially adapted to those who have been brought up and trained in the more established paths of psychology and therapeutics. Even the fact that Putnam was not a blind and indiscriminate advocate, as a more youthful and ignorant disciple might pardonably be, adds the more weight to his convinced testimony. It is doubtful whether any more graciously persuasive appeals in favour

of the essential doctrines of psycho-analysis have ever been put forward; that "On Freud's Psycho-analytic Method and its Evolution" (1911) may perhaps be specially noted. The consideration which Putnam always shows toward those he differs from—a quality not always revealed by younger psycho-analysts—adds alike to the weight and to the charm of these appeals. It is true that one cannot quite accept, on the basis of this book, what Dr. Ernest Jones says of Putnam as "a master of English," and of his "easy and fluent style." Easy writing, it has often been pointed out, is not always easy reading, and Putnam, like so many American medical authors, here often tends to be diffuse, vague, and disorderly. It must, however, be remembered that these papers are mainly "addresses," meant to be spoken, and not to be judged by the severe demands on written speech. From this point of view they are adequate, and not only reveal that persuasiveness which is the object of all spoken eloquence, but also, from time to time, many happy phrases and illuminating metaphors.

Putnam was not only the strenuous champion of Freud, but also, throughout, a faithful critic. The title of the last paper in this volume—"Elements of Strength and Elements of Weakness in Psycho-analytic Doctrines"—is characteristic. Freud, as Putnam saw him, stands out as "a courageous, unflinching, pioneer-investigator and a man of genius," but one looks to him in vain for "broad and balanced views of life in all its manifest aspects," though in one place at least Putnam himself takes the edge off this criticism by adding that if Freud had possessed this broader philosophic vision psycho-analysis might not have come into existence at all. Putnam is seen at his best as an acute and discriminating yet sympathetic critic in the chapter on Alfred Adler's work. He recognises, as many of us cannot fail to, how "intrinsically interesting," and "often useful" that work is, but he realises that Freud's vision, in spite of what seemed to Putnam its limitations, is much wider and more faithful than Adler's, and he reasonably regrets that Adler should have attempted to supplant Freud's doctrines, instead of confining himself to the task, for which he is so much more fitted, of supplementing them. To the developments of the Swiss school Putnam seems to have given little attention, and this is the more remarkable since its ethical and religious tendencies might well have appealed to him.

A portrait is prefixed. But the book lacks an index, which should be regarded as essential to every book of this kind put forward as of more than mere passing interest.

HAVELOCK ELLIS.

Suggestion and Auto-suggestion : A Psychological and Pedagogical Study Based upon the Investigations made by the New Nancy School. By CHARLES BAUDOUIN, Occasional Professor at the University of Geneva. Translated by EDEN and CEDAR PAUL. London: Allen & Unwin, 1921. 8vo. Pp. 288. Price 15s.

It is only four years since Bernheim, who (inspired by Liébaault) was the founder of the Nancy School, published his last book (reviewed in the *Journal* at the time), dying very shortly afterwards at an advanced age. Now the practice and doctrine of the Nancy School have been carried

forward, in an entirely natural and logical manner, developed, extended, and in some degree superseded, by the New Nancy School, of which the practical initiator (corresponding to Liébaault) is Edouard Coué, and the scientific exponent (corresponding to Bernheim) Charles Baudouin. In their hands nearly everything that was once held regarding hypnotism melts away; it is transformed not merely into suggestion but into auto-suggestion, for the part of the suggester becomes unimportant and even superfluous. It is the subject himself who plays the chief part in the process. This process is entirely normal and wholesome; it is common to practically the whole of humanity and is constantly being practised in an unconscious manner. All that is needed is a little guidance to enable the full social, therapeutic, and educational advantages to be obtained, and to obtain this guidance medical aid is in most cases unnecessary and even out of place.

We may observe the new position of this school in noting the author's references, which are not numerous, to Bernheim. His great part is recognised, but he is usually criticised. It is pointed out that Bernheim still upheld the antiquated view that suggestion is solely efficacious in functional disorders, although, as Bonjour had amply shown nearly ten years ago, it is also effective in organic disease. Bernheim, moreover, too closely identified the hypnotic state with normal sleep. On the theoretical side, again, his ideas were at once too simple and too complex, while his terminology was confusing, and he had no proper conception of the importance of the unconscious. In this matter the New Nancy School comes close to the psycho-analysts; Baudouin has written psycho-analytic studies, and considers that the doctrines of psycho-analysis and of the New Nancy School are parallel, and to some extent complementary to each other, though he cannot help adding that the New Nancy School is simpler and more lucid, more truly akin to the Latin spirit.

The work is divided into three parts, concerned successively with spontaneous suggestion, reflective suggestion, and induced suggestion. The first part discusses, in a very interesting manner and with copious examples, auto-suggestion regarded as a natural phenomenon of mental life, in constant operation, sometimes acting beneficially, and sometimes harmfully. Such spontaneous suggestions are divided into three groups: Representative (images, judgments, hallucinations, etc.); affective (sensations, emotions, passions, etc.); active or motor (habits, functional and organic modifications, etc.). We are, in one way or another, constantly exerting a profound but unconscious influence upon ourselves by auto-suggestion. It is important that this influence should be brought to bear upon desirable ends.

But how are we to turn our minds from undesirable ends? This brings us to "reflective suggestion" and "the law of reversed effort," which Baudouin regards as the really original contribution of the New Nancy School and Coué's discovery of it his "stroke of genius." He gave it no name; he has never formulated it psychologically nor analysed it; but, Baudouin insists, he discovered it. Coué's practical formulation of it is, in his own words—"When the will and the imagination are at war, the imagination invariably gains the day.

Therefore the will must not intervene in the practice of auto-suggestion." If the will is working against the imagination it is not merely powerless to effect its end, it strengthens the very tendency it is seeking to overpower. Therefore it is worse than idle to seek to educate the will. What we have to do is to educate the imagination. Auto-suggestion must be superadded to (not substituted for) the will, and it is only on condition that it is not confused with voluntary effort that it can be brought to full fruition. This is regarded as the chief innovation made by the New Nancy School. The effective part of the process of suggestion is held to take place in the unconscious (the term preferred by Coué, while Baudouin prefers "sub-conscious"). Therefore the equivalent of voluntary attention, the key to reflective suggestion, must be sought by making use of, and if need be inducing, those conditions in which the outcropping of the unconscious tends to occur. The state of immobilised attention called hypnosis is such an outcropping, and so is a condition to which the new school attaches importance under the name of "contention." This state differs from attention and also from relaxation, and may be defined as "a psychological equivalent of attention minus effort." In other words it is the crossways where two opposites, attention and relaxation, meet.

Induced suggestion, which once covered nearly the whole field of hypnotism, has now sunk into the background, and the third part of Baudouin's book is the shortest. The whole process of suggestion takes place in the subject himself. The suggester merely exercises an adjuvant or guiding influence; he can transfer no force; he can effect no direct beneficial result, nor any direct harmful result. At the best he is merely educating the subject's natural power of auto-suggestion. Coué has abandoned profound hypnosis as part of a curative system. The methods and exercises he practises and teaches are here described in detail; they are modifications or elaborations of methods already known. All but 3 *per cent.* of the general population are amenable to these methods, and in this small minority the failure is due to low mental development and the inability to fix attention for even a few moments. Among the disorders, functional and organic, included among the cases here presented as cured or greatly benefited, are neurasthenia, metritis, fibromata, pulmonary tuberculosis, tubercular ulcer, Pott's disease, enteritis of long standing, intractable eczema, etc. Some of these results, as Baudouin points out, revolutionise our ideas of disease, and it is obvious that such results will need control by subsequent investigators. The cure, it is said, may vary greatly in rapidity. In some cases there is a counter-suggestion at work, and in others a whole elaborate complex, and when there has been spontaneous suggestion by complex the indication is rather for psycho-analytic treatment than simple suggestion. But when the morbid symptoms are due to spontaneous suggestion by a simple idea psycho-analysis can never compete with suggestion, which, indeed, sometimes works instantaneously. Psycho-analysis is to suggestion, the author remarks, what algebra is to arithmetic: it complicates simple problems, but it simplifies complex problems.

It cannot be said that the book has much direct bearing on the work of the psychiatrist, for (as Forel and others long since pointed out) the

insane are not amenable to hypnotism or suggestion ; suggestion being a normal function of integrated mind, it is not to be expected that it will remain intact in the process of mental disintegration. But the book remains of value for all those concerned with psycho-therapeutics and especially psycho-analysis. It is attractively written, and many points of special or general interest are incidentally discussed.

HAVELOCK ELLIS.

Psycho-analysis and the War Neuroses. By Drs. S. FERENCZI (Budapest), KARL ABRAHAM (Berlin), ERNST SIMMEL (Berlin), AND ERNEST JONES (London). Introduction by Prof. SIGM. FREUD. London: Allen & Unwin, Ltd. (for the International Psycho-analytical Press), 1921. Medium 8vo. Pp. vi + 59. Price 7s. 6d. net.

It may very likely be true that the ætiology and mechanisms involved in the production of the war neuroses are by no means so simple as perhaps most observers have been wont to regard them. During the war few who had charge of such cases found their leisure sufficient to make deep studies of individual mentalities even if thought necessary, and therefore those who had cast away the old and useless materialistic conceptions came principally to two conclusions. Auto-suggestion at the moment of some emotional shock could account for many symptoms, while others were due to the psychic conflict between the fear of self-preservation and duty to the herd, with the repression of the former. That both these factors had some intimate relationship with the neurosis may be conceded, but not a few of the psycho-analytic school who have analysed more intensely state that the basic roots lie much deeper. Opponents of Freudism have pointed with satisfaction to the above pathological theories because they seemed to demonstrate that no sexual element entered therein, and that therefore war neuroses differed in their essential mechanism from civil ones, or Freud was entirely mistaken in his conceptions as to the origin of a neurosis. The writers contributing to this book think otherwise, and endeavour to show that adequate study may confirm Freud's views, and that at any rate if the—up to the present superficial—investigation of war neuroses has not shown that the sexual theory of the neuroses is correct, that is quite another matter from showing it is incorrect.

Freud states that in the traumatic war neuroses the ego of the individual protects itself from a danger that either threatens it from without, or is embodied in a form of the ego itself ; in the peace time transference neuroses the ego regards its own sexual hunger as a foe. It might even be said that in the case of the war neurosis the thing feared is after all an inner foe, in distinction from the pure traumatic neurosis and approximating to the transference neurosis.

Ferenczi traces most anxiety symptoms to an increased ego sensitiveness, for because of shock, interest and libido are withdrawn from without, and a damming up of the libido in the ego results which may degenerate into a kind of infantile narcissism. Anxiety is the sign of the shock to the self-confidence. Those symptoms which only express the situation at the moment of trauma are the conversion hysterias.

There is a primary motive of pleasure in remaining in secure childish retreat, and a secondary gain of compensation in flight from the front. Such reactions are atavistic and seen in animals.

Abraham has much the same view-point. The potential war neurotic cannot suppress his narcissistic tendency, cannot sacrifice his ego for the herd, and the trauma which destroys his narcissistic belief in his immortality sets up a neurosis through regression. Inquiry would show that the victims were bad adaptors to life with infantile fixations. The exclusive association with men may aid the development of a neurosis as narcissism and homosexuality are intimately connected.

Simmel thinks that there is a narrowing of the personality complex from compulsory discipline and psychical exhaustion, that from emotional repression there accumulates undischarged mental material, and that with a disaster the individual breaks down. Auto-suggestion plays a rôle in that the neurotic succumbs to over-strong emotionally toned ideas which have arisen at a time when the ego complex is weakened or suspended. Consciousness refuses to assimilate the horrors, and the power of the unconscious attracts the whole psychosis, terror and the dread of death constituting the primary basis of the dissociation. Simmel treated his cases by a combination of analytical-cathartic hypnosis with analytical converse during the waking state, besides dream interpretation.

Jones finds it difficult to think that the primary gain of illness (*i.e.*, wish to leave the front, etc.) without other factors can adequately account for a war neurosis, as it only involves half-repressed and half-conscious conflicts. The same holds good of the idea that the neurosis is the result of a conflict between the ego-ideal and the instinct of self-preservation, as both tendencies belong to the ego and both states of mind are in contact with reality. He discusses the components of fear, and feels that the useless component of dread is akin to the morbid anxiety shown in the neuroses. The terror in the war neuroses may be the same as morbid anxiety. This latter depends on repressed sexual hunger, and the former may therefore be due to repressed narcissistic hunger. Intolerance of this leads to dread in the presence of danger, and is correlated with the inhibitions of other manifestations of fear with the accumulated tension characteristic of life in the trenches. Jones comes from this to the comforting conclusion that a normal man (*i.e.*, one with no undue narcissism) would be entirely free from fear in the presence of any danger.

In order to assimilate much that is in this book one has certainly to be conversant with modern psycho-analytical work. Freud's latest investigation of narcissism has seemingly been very fruitful in its application to mental disorders, and it seems likely that through the efforts of his school the psycho-pathology of the war neuroses will be placed on a much firmer foundation. At present only the fringe has been touched. The contents of this little book are very readable, and any recommendation is superfluous in view of the authors' names.

C. STANFORD READ.

Mental Hospital Manual. By JOHN MACARTHUR, M.R.C.S., L.R.C.P.
London: Henry Frowde and Hodder & Stoughton, 1921. Demy
8vo. Pp. x + 215. Price 15s.

An author who succeeds in carrying out, in his book, his intentions as stated in his preface is surely to be congratulated, especially so when the subject dealt with is as many sided as the one essayed in the work before us. Dr. Macarthur has ably filled a gap, which for some time has been beginning to be felt in psychiatric literature, for although there are available several good text-books relating to mental diseases, no practical manual has appeared in recent years which deals at once with the administrative, clinical, and legal sides of psychological medicine. The more the life in our large public mental hospitals is written up, and the truth about such institutions laid bare, whether as regards doctors, nurses, or patients, the better chances there are of dispelling the ignorance and prejudices of people generally regarding the treatment of the insane. Such books act as an antidote to the trash so freely distributed by the press and by irresponsible writers to a credulous public, credulous because of the mystery which still surrounds our great mental institutions, and, in addition, always ready to believe the worst about a side of our social life it would sooner forget. Dr. Macarthur's *Mental Hospital Manual* appears at a most opportune moment, when the public mind has been strangely (to us) upset by the least authoritative of any publication dealing with the lunacy problem which has appeared for many years. Our author is modest and plainly honest, and, backed by fourteen years' mental hospital experience, obviously knows what he is writing about. He demonstrates rather than teaches. He does not dogmatise as to what he thinks should happen, but rather narrates what actually does happen, and why.

The book is primarily intended for the guidance and instruction of medical officers on joining for the first time the service of a mental hospital, and contains the practical knowledge of psychiatry gathered by every medical officer of average ability and experience. It will also be useful to those practitioners who have not had the advantage of a psychiatric training. Incidentally it will prove a boon to the senior medical officers whose lot it is, as a rule, to break in to the work a newly-joined colleague, especially as regards the smaller details. The mental hospital is first described—its purposes, the wards, and administrative buildings. Following this is an excellent *résumé* of the duties of assistant medical officers with regard to patients and staff. Subsequent chapters deal with the treatment of the insane, emergencies, treatment of special mental states, the admission and discharge of patients, how to deal with patients of defective habits, contagious diseases, etc. Concluding chapters relate to the legal aspect of the subject—legal control, lunacy law, reception orders, classes of patients, statutory books, notices, etc.

The subject matter, though in condensed form, is very readable. Lucidity, soundness, and practical utility characterise the work throughout, and our strong advice to all junior medical officers is to buy it, study it, and be guided by it.

The only criticism we would make is that Dr. Macarthur has, we should imagine, limited himself a good deal to practices which obtain in

the institution—famous, as it is—in which he serves, and also, not by any means universally so, but in a not inconsiderable degree, in all the London County Mental Hospitals, and has not roamed farther afield.

Though the sections of his book dealing with the actual care and treatment of patients are applicable generally and will find ready acceptance, yet the administration of mental hospitals, though fundamentally the same, varies in details in different counties, and a broader outlook and some mention of alternative methods, and especially an additional chapter dealing with private institutions and voluntary patients, would enhance the value of a subsequent edition, and enlarge the area of its usefulness.

We trust, however, that Dr. Macarthur's work will appeal to the reading public generally, and we especially commend it to those who are genuinely anxious as to what is happening in our large mental hospitals. It will also be informative to those who, knowing no better, both publicly and privately condemn the mental hospital medical service as lacking in medical interest and vitality, and leading to mental and moral decay—a dead end to be avoided at all costs.

It reveals the immense trouble taken to secure what the public are most anxious about, and that is, the kindly treatment of the patients. Given a trusting and unprejudiced public opinion, one can gather from its pages how much the burden of administration could be lightened and the time thus wasted devoted to medical treatment; and, allowed more expenditure, how readily all the strictures, so freely bestowed upon us, could be met and the hospitalisation of asylums completed.

JOHN R. LORD.

Lectures on Mental Defect and Criminal Conduct. Delivered to the Members of the Class of Psychological Medicine, Maudsley Hospital. By Sir BRYAN DONKIN, M.D., F.R.C.P., late one of H.M. Commissioners of Prisons. (Reprints from *Lancet*, 1921.)

In these lectures on mental deficiency in relation to crime which he delivered at the Maudsley Hospital in the session of 1920, and which he has now published in pamphlet form, Sir Bryan Donkin has supplied a much-needed corrective to the flatulent speculation which bulks so largely in the literature of criminology. It has been the misfortune of that embryo science that its biological and its sociological aspects have usually been studied in entire isolation from one another, with the result that there has been no adequate recognition of that mutual interaction of individual and environmental factors which determines the form and direction of conduct in criminals as in all men. The exclusive attention to one or other of these two sets of factors has necessarily led to exaggerated and one-sided views, which, being in obvious conflict with facts of every-day experience, have tended to discredit the application of scientific methods to the study of the criminal. This has been most conspicuously the case in regard to those theories which purport to explain criminal conduct by referring it directly to assumed biological conditions—a method of easy generalisation which still finds numerous votaries. For the practitioners of this method it is sufficient to postulate, in regard to crime, as in regard to any other form of anti-social

behaviour, the existence of a specific innate tendency, stronger in those persons who display the particular form of conduct in question, weaker in those who abstain from such conduct. The "criminal diathesis," the inborn tendency to break the law, is thus put forward as an adequate explanation of the criminal, just as the inebriate diathesis, the inborn craving for the effects of alcohol, is supposed to explain the drunkard, and as, no doubt, an inborn and heritable craving for self-destruction should explain the suicide. So far as crime is concerned, this peculiar doctrine is no longer maintained in so crude a form; the conception of the criminal as a specific biological type is hardly to be found nowadays outside the pages of sensational fiction. But under a more plausible guise the same fundamental fallacy inspires a theory which still enjoys some vogue—the theory that criminal conduct is always or ordinarily a result and expression of mental deficiency. The refutation of this theory is the aim of Sir Bryan Donkin's lectures; and he has achieved that aim with the complete success to be expected from a critic so admirably qualified for the task by his powers of acute reasoning, broad judgment and lucid exposition, and by his rare and exceptional experience both of criminals and of mental defectives.

Sir Bryan, it is needless to say, does not minimise the importance of mental deficiency as a factor in criminal conduct: no one, indeed, has been more insistent in drawing public attention to this aspect of the problem of crime. But his practical acquaintance with criminals has impressed upon him the equally significant fact that the large majority of convicted law-breakers are not mentally defective, and do not differ greatly, if at all, from the bulk of the unconvicted population of social grades and circumstances similar to their own.

The high proportion of mental defectives amongst convicted prisoners affords no basis for generalisations about the biological characters of criminals as a class, for criminals form a class only in a sociological and not in a biological sense. And that is why, as Sir Bryan Donkin, rightly insists, the methods of statistical analysis are of very restricted value in their application to the study of the biological factors of conduct. No one, of course, disputes the fact that there are relatively many more mental defectives amongst the inmates of prisons than in the general population, but it adds nothing to our knowledge to translate this proposition into pedantic language, and to assert that "the one vital mental constitutional factor in the ætiology of crime is defective intelligence." A social group is not comparable with a chemical compound or with an alloy; the fact that a random sample of convicted prisoners will be found to include a substantial percentage of feeble-minded persons does not involve the same implications as the fact that the analysis of a sample of brass will show the presence of a substantial percentage of tin. In problems of conduct we are dealing with factors of a more complex character than the adherents of the biological school of criminologists would seem to realise; the criminal differs from the non-criminal by his acts and not by his aptitudes, and if we are to gain any true insight into the genesis of crime, we must consider it not as the outcome of biological conditions alone or of the force of circumstances alone, but as the resultant of the interaction of these two factors in combinations far too complex and too variable in

different cases to be susceptible of investigation by other than clinical and individual methods. Sir Bryan Donkin has rendered a signal service to criminological science by insisting on these fundamental points, and he will certainly carry with him the judgment of everyone practically experienced in the matter when he asserts that "the proper and fruitful understanding of criminals depends mainly on the careful study of the individual offender."

W. C. SULLIVAN.

Psyche: A Quarterly Review of Psychology. Vol. 2, No. 1 (New Series).

London: Kegan Paul, Trench, Trubner & Co., Ltd., July, 1921.

Price 5s. net.

The new volume opens with an editorial in which the aims of this journal are outlined. Attention is drawn to the wide-spread interest in psychological topics which is so manifest at the present time, and emphasis is laid on the importance of directing this interest towards the proper aims, and of basing it upon reliable data. It is intended that *Psyche* should provide a conspectus of all the most reliable views, while not ignoring more advanced and tentative developments on which opinion is divided. The papers cover a wide range of subjects and are concerned with a number of interesting psychological topics.

The article of more immediate interest to the psychiatrist is that by Dr. Prideaux on "Criminal Responsibility and Insanity." The view expressed is that the law of 1843 is based on a faulty psychology, and that its strict interpretation must involve a miscarriage of justice if justice is to be based on morality. Dr. E. Prideaux feels that as medicine is not yet in a position to advise as to any positive criterion which might be formulated in law, moral responsibility in each case must be decided practically as an individual problem. Dr. J. P. Lowson has an article on "The Interpretation of Dreams"; Major R. E. Priestly writes on the "Psychology of Exploration"; E. J. Dingwell on "Scientists and Psychical Research"; Col. E. H. Richardson on "The Homing Instinct in Dogs"; Dr. H. Hartridge and W. Whatley Smith on "Sleep"; and Dr. G. H. Miles on "The National Institute of Industrial Psychology."

The Clinical Examination of the Nervous System. By G. H. MONRAD-KROHN, M.D.Christiania, M.R.C.P.Lond., M.R.C.S.Eng.; With a Foreword by T. GRAINGER STEWART, M.D., F.R.C.P. London: H. K. Lewis & Co., Ltd., 1921. Crown 8vo. Pp. xv+135. 12 Illustrations. Price 6s.

This work, though of small size, is very complete and comprehensive in outlook. Emphasis is laid upon the interdependence of neurology and psychiatry in the elucidation of problems of the nervous system. Dr. Grainger Stewart in his Foreword bemoans the tendency in the past to separate neurology from psychiatry, and regards as a welcome sign of the times the present tendency to bring them closer together. Our author is equally emphatic, and holds the view that a neurological examination is incomplete without an investigation of the patient's mental condition and *vice versa*. He gives practical effect to this by placing cerebration as the first matter to be closely examined after ascertaining the general facts in connection with the illness, such

as the different data regarding the patient's family, previous life, history of present illness, etc.

The book, therefore, is likely to prove particularly useful in mental hospitals where a more or less complete examination is made of the nervous system of patients on admission, and though all are presumably cases of disordered mental function yet they not infrequently have in addition symptoms of other nervous diseases, functional or organic, of which any failure to discover would be a grave injustice to the patient and jeopardise the chances of successful treatment.

The systematic examination of the cranial nerves, the motor and sensory system, the reflexes, the standing position and gait follow. Further chapters are devoted to simulation, electrical examination, the cerebro-spinal fluid, while in the appendix the Binet-Simon tests, the psychosomatic examination, diplopia, and vestibular tests are specially dealt with, and three very useful anatomical diagrams included, giving a rough orientation of the more essential anatomical facts.

Dr. Monrad-Krohn is well known to our readers as a painstaking and thoughtful clinician. His book is no mere compendium of well-known neurological methods, but one obviously based upon practical and personal experience, thus enhancing its value. It is full of useful hints and points for guidance, especially of students and young clinicians.

JOHN R. LORD.

Part III.—Epitome of Current Literature.

I. Mental Hygiene.

- (1) *The Technical Organisation of Mental Prophylaxis* [*L'Organisation technique de la prophylaxie mentale*]. (*Ann. Med.-Psych.*, November and December, 1920.) Toulouse and Genil-Perrin.
- (2) *Mental Prophylaxis (How it is realised in Switzerland)* [*La Prophylaxie mentale (Comment on la réalise en Suisse)*]. (*Ann. Med.-Psych.*, November and December, 1920.) Toulouse and Genil-Perrin.
- (3) *Mental Hygiene in America* [*L'hygiène mentale en Amérique*]. (*Ann. Med.-Psych.*, November and December, 1920.) Legrain.

In view of the prominence which has been given to the question of the treatment of incipient mental disorders by the Medico-Psychological Association, especially at the last general meeting, it should prove not only interesting but useful to know what other countries are doing in this important matter.

I. Discussing *the early diagnosis of predisposition*, the authors maintain that the presence of physical stigmata of degeneration is of uncertain value. As regards psychic stigmata—variability of mood, perversion of instincts, obsessions, impulsions, etc.—these are recognised to be definite psychopathic phenomena, though mild, and it is already too late, when they are present, to speak of simple predisposition. What essentially

constitutes psychopathic predisposition is a state of lowered psychic resistance. It should be possible to find means of putting this state of lowered resistance in evidence in the case of the intellectual functions, since it has been done in the case of the visceral functions. Thus slight hepatic insufficiency can be detected by producing experimental glycosuria, and a cardiac lesion becomes more apparent to auscultation after submitting the patient to the exercise tolerance test. In like manner there is no reason why one should not apply to the psychic functions a method which has proved so helpful in the study of other functions. Suitable mental tests should be sought along the lines indicated by Binet, Mosso and others; the psychiatrist, however, should concentrate preferably on the discovery of practical and more rapid mental tests with the object of applying them to large numbers. Such tests should be supplemented by clinical methods; in fact the latter should still form the basis of the examination of those liable to mental disorders.

II. *The social technique of mental prophylaxis.*—According to the authors no organisation exists in France for dealing in an adequate manner with early and incipient mental cases. Though they find encouragement from the fact that a French Committee of Mental Hygiene has recently been created, it is admitted that they still have much to learn from the American organisation bearing that name.

The principles of mental hygiene as practised in the United States may be set forth as follows:

(1) Surveys: By means of surveys the various States, districts, towns and villages are thoroughly investigated with a view to discovering persons with morbid mental tendencies, reactions, and conditions.

(2) Education of the general public, through newspapers, magazines, pamphlets, lectures, exhibits, etc., in order to create an interest in the question of insanity and feeble-mindedness in all its forms.

(3) Consultations with superintendents and managers of institutions, and with public authorities, visits to institutions, and consultations with all groups interested in mental health problems.

(4) Another department encourages initiative in various ways, *e.g.*, by establishing schools for mentally defective children, reformatories, institutions for epileptics, etc., or by promoting legislative reform.

(5) The psychiatric clinic occupies a very important place in the mental hygiene programme. The clinic may include beds as well as an out-patient department. The following are the functions which the mental clinic aims at fulfilling:

(a) To provide facilities for the treatment of incipient mental cases.

(b) To provide a home for sound advice.

(c) To supervise cases discharged from mental hospitals and those on "parole."

(d) To constitute a centre of education for both students and post-graduates.

(e) To offer facilities for laboratory and clinical research.

(f) To serve as a filter between the community and the asylum, as well as between the community and the prison.

The social worker.—The clinic is dependent for its success on the

social worker. These men and women are trained to penetrate into the family, school, workshop, prison, etc., in order to get into contact with individuals, to study their special conditions of existence, and to facilitate their admission into hospital or clinic.

In Switzerland mental prophylaxis has been aimed at for years past by the societies of patronage of the insane. The object of these societies is to overcome popular prejudices in regard to the insane and asylums; to educate the general public as to the nature and causes of mental trouble, their curability, and their prevention; to fight against alcoholism and other social causes of mental troubles; to take the initiative in legislative reforms; and in particular to call in the services of the psychiatrist in urgent cases so that he may order the appropriate treatment in time.

The Swiss alienists have faith in the efficacy of the polyclinic for the treatment of psychopaths and incipient cases. Statistics demonstrate the fact that large numbers of these cases escape asylum and private care, and efforts are being made to get them to attend the polyclinics.

It is affirmed that the development of polyclinics would ensure a wider outlook in psychiatric teaching, and would make it possible to show the student mental cases in their early stages, and of a type more commonly met with in general practice. NORMAN R. PHILLIPS.

- (1) *The Field of a State Society for Mental Hygiene.* (Amer. Journ. of Ins., January, 1921.) Abbot, E. S.
- (2) *Medical and Social Aspects of Childhood Delinquency.* (Amer. Journ. of Ins., January, 1921.) Brown, Sanger.
- (3) *The State Psychopathic Hospital.* (Amer. Journ. of Ins., January, 1921.) Barrett, A. M.

These three papers emphasise the necessity for the promotion of mental hygiene in the community, and the organisations necessary for this and for the treatment of mental disorder when it arises.

The writer in the first paper sums up what mental hygiene connotes as follows: "Mental hygiene touches or includes within its field of interest the fostering of normal mental developments and activities, the prevention of abnormal developments and reaction-types, the case of those who are mentally handicapped, and the supply of *personnel* and facilities to put these into effect. It is interested in *environments*, that they may be wholesome and exert a good influence upon the development of right mental attitudes and habits and upon the correction of wrong ones; in *persons*, that they may have the best surroundings and develop and preserve or regain the most healthful types and habits of mental reaction; and in *institutions* and *agencies* that they may carry on investigations and researches, provide the best guidance and aid in improving environment, and teach, train and help individuals." An account is given as to how these aims may best be promoted. In many States societies have been formed for this purpose, and although no one State society can cover all the necessary ground at one time, it may take one, two or three objects as its major activities, these being determined by the special needs, conditions or opportunities within the State. In Pennsylvania there was need of the segregation of feeble-minded women of child-bearing age but no facilities. A survey was

made by the State society, and through its influence a village was opened up for the care of that class. The same society carried on an effective propaganda throughout the State to demonstrate the value of special classes for the exceptionally able in public schools, and for those so handicapped in any way as not to be able to receive proper education in ordinary classes. It also helped in framing good provisions and laws relating to the insane and feeble-minded, and, later, to get them through the legislature.

The second paper is the result of a survey on the underlying causes of delinquency in a probationary school in New York City by the National Committee for mental hygiene. In each delinquent it must be asked whether the conduct disorder—truancy, petty thieving, disobedience, gambling, an antisocial state of mind—is due to some physical defect, or does it rest in the mental sphere, possibly on a basis of unrecognised mental deficiency; or is it one of personality, or due to a faulty environment, or is it the result of definite mental conflicts?

Nervousness.—A fair number of the children show nervous symptoms—insomnia, over-activity, inactivity, neurotic physical symptoms—producing shyness, seclusiveness, and consequent maladjustment. Many of these mental states with nervousness can, however, only be explained on a psychological basis, and not on mere nervousness.

Mental deficiency.—It has been shown that a considerable number of delinquent children are mentally deficient; with the greater number, however, the problem is one of mental maladjustment rather than of mental defect.

Personality.—It seems likely that delinquencies are indications of a special personality in these children naturally predisposing them towards conduct disorders. This personality, however, is probably something acquired as the result of unfavourable influences in early childhood, as the symptoms—solitary and seclusive tendencies, suspiciousness and antisocial traits—generally appear to be the result of some definite cause which can be discovered or understood. Some children have tendencies towards mental development in very special directions, causing inattentiveness in routine studies, solitariness, and leading to truancy and delinquency. Here it seems to be a question of special interests and not so much one of personality.

Environment.—Some cases of delinquency and truancy can be ascribed to faulty environment, bad companions, improper home training and other similar factors.

Recommendations.—Association with child-welfare societies is necessary, as in the majority of cases the social and environment problem is the most important one. The children should be separated from the general classes in the school as they need individual observation and study. In many cases a change in environment is necessary. The children after leaving school should be followed up by trained social workers and the necessary guidance given. We must free ourselves from the idea that these conditions are inherent and inherited and that nothing can be done for them. If proper assistance be given during childhood before these tendencies become rigid and fixed there is reason to believe that a cure can be effected. Several interesting illustrative cases are given.

The third paper deals with the necessity for the psychopathic hospital and the problems it must attack. For efficient work the hospital should only have a limited number of patients—between fifty and a hundred—it must be adequately staffed by specially qualified psychiatrists, and it should have ample laboratory facilities. As well as dealing with the case of those mentally disordered, it must co-operate with schools, courts, state mental institutions, mentally deficient homes and welfare organisations. The fundamental activities of the hospital are—(1) observations, (2) treatment, (3) research, (4) teaching. The legal provisions governing the admission of patients should be as free as possible from formalities that may in any way produce social embarrassment for the patient, although legal restraint of some sort is necessary. There should be intimate co-operation between the psychopathic hospital and the State mental institutions; material for study can be furnished by the latter and the results communicated to them; patients can be transferred from one to the other where it be deemed advisable. If possible the hospital should be within easy access to a medical school, as one of its most important functions is to serve as a teaching centre for psychiatric training. In its connection with criminal and juvenile courts it can be of great service in the determination of mental disorders in those accused of crime or delinquency. The hospital should maintain out-patients' clinics, travelling field services, and should, through its social workers, carry on investigations that concern their patients in respect to family, school and occupational life. The position and facilities of the hospital should make it a leader in the field of mental hygiene, and a force for educating the public regarding whatever is active in impairing the mental life of the people.

C. W. FORSYTH.

Patients with Mental Disease, Mental Defect, Epilepsy, Alcoholism and Drug Addiction in Institutions in the United States on January 1st, 1920. (Fourn. of Ment. Hygiene, January, 1921.) Pollock H. M., and Furbush, Edith.

A census of these patients was made by the National Committee for Mental Hygiene in 1917, 1918 and 1920. The present survey includes those actually in institutions—i.e., not on parole, etc.—on January 1st, 1920. 625 institutions are represented, viz., Public Health Service hospitals, State, city, county, and 237 private institutions. Almshouses, penal and reformatory institutions are not included. A. *Patients with mental disease*: These number 232,680, 52 per cent. being males and 48 per cent. females: 9,238 were in private institutions and 1,040 in institutions for temporary care. The latter number 21, distributed among 12 States, and comprise psychopathic hospitals, psychopathic wards in general hospitals and detention hospitals. Mental and nervous cases are also admitted temporarily to nearly all the 54 Public Health Service hospitals for ex-service men and women. The total proportion in institutions—220 per 100,000 of the general population—has increased in recent years more than the incidence of mental disease. There is great disparity in the different States in sex distribution and in the total number in relation to population.

The latter is partly explained by unequal adequacy of provision made, and by the attraction to certain States of young, virile workers. B. *Mental defectives not counted under A*: These number 40,519 (20,123 male and 20,396 female). In spite of great increase the numbers are still too inadequate to the need to give an indication of the incidence among the population. C. *Epileptics not comprised under A*: These number 14,937, *viz.*, 7,939 males and 6,998 females. D. *Inebriates (alcoholic and other drug addicts) not included under A*: The figures are of interest in relation to the Restrictive and Prohibition Acts. The numbers on January 1st were—in 1917, 4,891; in 1918, 3,565; in 1920, 1,971. In 1920 these comprised 1,163 alcoholics (6 males to 1 female), of whom over half came from 5 of the 48 States, while 10 States reported no alcoholics in institutions. All State hospitals for inebriates have now been closed. *Patients absent from institutions, but still on the books*, numbered 18,268. Parole laws differ in different States, the period varying from 30 days to 2 years. Some States have a well-organised system of after-care and supervision under the direction of social workers, while others exercise no supervision over patients on parole.

MARJORIE E. FRANKLIN.

Decline of Alcohol and Drugs as Causes of Mental Disease. (Mental Hygiene, January, 1921.) Pollock, H. M.

The data for this paper are furnished by the Bureau of Statistics of the New York State Hospital Commission, and include returns from 13 State hospitals. Only first admissions—*i.e.*, to any institution for mental disease—are considered. First admissions and the alcoholic ratio were both abnormally high in the war year 1917, while for part of the fiscal year ending June 30th, 1920, the Prohibition Amendment was in force. Excluding 1917, (a) the ratio of first admissions to 100,000 of the population increased steadily from 58.6 in 1909 to 67.3 in 1918, and fell to 66.3 in 1919 and 1920; (b) the alcoholic psychosis fell gradually from 10.8 *per cent.* of first admissions in 1909 to 5.2 *per cent.* in 1918, and was 4 *per cent.* in 1919 and 1.9 *per cent.* in 1920; (c) the intemperate use of alcohol among first admissions without alcoholic psychosis was returned as 28.7 *per cent.* in 1910, 16.2 *per cent.* in 1918, 14.2 *per cent.* in 1919 and 12.2 *per cent.* in 1920. Mental disease due to drugs, always low in the hospitals of this State, has not increased, and was 0.2 *per cent.* in 1920. MARJORIE E. FRANKLIN.

Part IV.—Notes and News.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

EIGHTIETH ANNUAL GENERAL MEETING.

THE EIGHTIETH ANNUAL GENERAL MEETING of the Association was held on Tuesday, Wednesday, Thursday and Friday, July 12th to 15th, 1921, at the house of the Royal Society of Medicine, London, under the presidency, in the early proceedings, of Dr. W. F. Menzies, F.R.C.P., and later that of Dr. C. Hubert Bond, C.B.E., F.R.C.P.

MORNING SESSION.—TUESDAY, JULY 12TH.

Dr. W. F. Menzies, President, in the chair.

There was a large attendance of members, including several distinguished honorary members and foreign associates. The Educational and Parliamentary Committees met on the previous day, as did the Council. The latter also held a meeting just prior to the morning session.

The following wrote regretting their inability to be present: Sir Clifford Allbutt, Dr. J. T. Anderson (Perth W.A.), Sir John Baker, Drs. H. W. Dudgeon (Khanka), M. H. Downey (Adelaide), Gomme (Paris), Sir Frederick Needham, L. D. Parsons (Ceylon), E. Powell, J. Macpherson, D. J. Williams (Jamaica), J. Warnock (Cairo), D. Nicolson, Prof. Pear, and Dr. Semelaigne (Paris).

MINUTES.

The minutes of the last meeting, having already appeared in the Journal, were taken as read and approved.

THE LATE SIR GEORGE SAVAGE.

The PRESIDENT said he was sure members, before commencing the business of the meeting, would like to express the sense of grief they felt at their recent loss by death of Sir George Savage, who was almost the *doyen* of the specialty and of the Association; he was its father and mother, and always took an immense interest in all that it did. Members knew him so well that words became really superfluous. Sir George was one of the three original minds—Hughlings Jackson, Maudsley and Savage; they were men whose mentality extended far beyond their mere professional interests. They were eminent in every line of human thought, and could talk on any subject, whether it be sport or work. He asked the meeting to pass a vote of condolence with the members of Sir George Savage's family.

This was carried by members rising in their places.

ELECTION OF OFFICERS OF THE COUNCIL.

The PRESIDENT proposed that the officers of the Association for the year 1921–22 be:

President.—C. H. Bond, C.B.E., D.Sc., M.D., F.R.C.P.

President-elect.—G. M. Robertson, M.D., F.R.C.P. Edin.

Ex-President.—W. F. Menzies, B.Sc., M.D., F.R.C.P.

Treasurer.—James Chambers, M.A., M.D.

Editors of Journal.—J. R. Lord, C.B.E., M.B., H. Devine, O.B.E., M.D., F.R.C.P., G. Douglas MacRae, M.D., F.R.C.P. Edin., W. R. Dawson, O.B.E., M.D., F.R.C.P. Ire.

General Secretary.—R. Worth, O.B.E., M.B.

Registrar.—Alfred A. Miller, M.B.

This was agreed to.

He next proposed that the nominated Members of Council be:

Sir Frederick Mott, K.B.E., M.D., F.R.S., Lt-Col. D. J. Thomson, and Drs. Bedford Pierce, G. W. Smith, J. Keay, and Nolan, and also Dr. A. Helen A. Boyle.

This was likewise carried.

ELECTION OF AN HONORARY MEMBER.

The PRESIDENT proposed that Sir Henry Carr Maudsley, K.C.M.G., C.B.E., M.D., F.R.C.P., Physician and Lecturer to the Melbourne Hospital, be elected an Honorary Member of the Association.

The motion was unanimously agreed to. It was supported by Drs. Bond, Chambers, Worth, and Sir Frederick Mott.

APPOINTMENT OF AUDITORS.

Drs. Colin F. F. McDowall and C. Molesworth Tuke were appointed auditors for the current year.

COMMITTEES.

The members of the following Committees were severally re-appointed:

Parliamentary, Educational (to which the names of Drs. Helen Boyle, E. B. Sherlock and G. W. Smith were added), Library, Research, Post-graduate Study.

THE REPORT OF THE COUNCIL.

The GENERAL SECRETARY (Major R. WORTH) read the Report of the Council for the year:

The number of members—ordinary, honorary, and corresponding—as shown in the list of names published in the *Journal of Mental Science* for January, 1921, was 689, as compared with 661 in 1920.

Number of new members elected in 1920	32
Number of members restored in 1920	0
Removed according to Bye-law 17	0
Number of members resigned in 1920	7
Number of deaths in 1920	12
Transferred to Hon. Members	0

Members.	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.
Ordinary . . .	690	696	695	679	644	632	627	626	626	656
Honorary . . .	34	35	34	34	34	32	33	32	26	24
Corresponding . .	19	19	18	18	18	18	18	18	9	9
Total . . .	743	750	747	731	696	682	678	676	661	689

That the representatives appointed by the Association to confer with the National Asylum Workers' Union with regard to the revision of the Asylums Officers' Superannuation Act have been in communication with the Ministry of Health, who have decided that the whole question of amendments for this Act will have to stand over until such time as they can be considered.

That Sir Frederick Mott delivered the Second Maudsley Lecture at the Maudsley Hospital, Denmark Hill.

At the Spring Meeting it was decided that Prof. G. M. Robertson should be nominated as President-elect.

That all the efforts made by the Association and all the discussions which took place on the Ministry of Health Bill had been made in vain as the whole Bill was withdrawn.

It appears that the General Nursing Council have done nothing definite in the matter of reorganisation of the examining of nurses for qualification. A small committee was appointed to watch what steps the Nursing Council were taking.

Meetings of the Council have been held in November, February and June, the latter taking place in June on account of the coal strike.

With regard to the accumulation of back numbers of the Journal, Messrs. Churchill were instructed to retain five copies only of all issues prior to 1914, and to keep twenty to twenty-five copies of subsequent numbers.

The Council had a sympathetic letter written to Mrs. Yellowlees on the death of Dr. David Yellowlees, who was President of the Association in 1890.

That the Hon. Secretary had been in negotiation with the President of the American Psychological Association with a view to co-operating in all matters concerning the welfare of the insane.

The President had received a letter from Dr. White, of Washington, expressing a wish for a meeting of some of the Delegates of the Canadian Branch of the American Psychological Association with our Association.

It is recommended that the Annual Meeting be adjourned for consideration of further Council report, *viz.*, the new edition of the Handbook.

The report was adopted.

THE TREASURER'S REPORT.

The TREASURER (Dr. J. CHAMBERS) submitted the revenue and balance-sheet for 1920. He moved its adoption, which was agreed to.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.—For the Year 1920.

REVENUE ACCOUNT—January 1st to December 31st, 1920.

Dr.		Expenditure.		Income.		Cr.	
1919.	£ s. d.		£ s. d.		£ s. d.	1919.	£ s. d.
542 19 1	To Journal—Printing, Publishing, Engraving, Advertising, and Postage	...	918 0 6	By Dividends—General	...	...	184 15 4
351 13 4	Examinations, Association Prizes, and Clerical Assistance to Registrar	...	842 5 11	" Sale of Journal	...	...	69 13 0
22 5 2	Petty Disbursements, Stationery, Postages, etc.	...	29 12 2	" " Handbook	...	...	15 4 1
133 14 11	Annual, General, and Divisional Meetings	...	185 15 2	" " Statistical Forms, etc.	...	...	12 4 4
100 18 0	Rent of Premises at 11, Chandos Street, care of Office	...	...	" Advertisements	...	...	...
8 8 0	Audit and Clerical Assistance	...	116 4 0	" Fees, Certificates of Psychological Medicine	...	281 16 9	254 19 6
110 17 0	Miscellaneous Account	...	10 10 0	" " Certificates of Proficiency in Nursing	...	1146 2 0	497 0 6
1279 10 3	Balance	...	153 11 3	" Subscriptions	...	600 8 0	670 19 0
260 5 2						2216 11 5	
1540 1 5				Balance	...	39 7 7	
						£2255 19 0	£1540 1 5

BALANCE-SHEET—31st December, 1920.

1919.		Liabilities.		Assets.		1919.	
£ s. d.			£ s. d.		£ s. d.	£ s. d.	
160 19 8	To Journal Account, balance of	...	300 6 5	By Lloyd's Bank :—Bankers	...	240 15 2	721 5 2
87 12 6	Examinations Account, balance of	...	131 0 0	Deposit Account, General	...	400 0 0	
2 0 7	Petty Disbursements Account, balance of	...	7 8 0	" " Asylum Workers' Convalescent	...		
20 1 0	Meetings Account, balance of	...	40 17 6	" " Fund	...		
29 1 0	Rent Account	...	29 1 0	Sales Account, balance of	...	70 0 0	
24 1 10	Miscellaneous, balance of	...	32 15 7	Subscriptions Account, balance of	...	221 2 2	57 6 7
14 8 6	Library Account, Dividends	...	12 5 8	Stocks, value at this date:	...	411 0 7	370 12 1
165 11 0	Gaskell	...	115 14 10	" New Zealand, 3½ per cent., 1940	...		
3 15 0	" Income Tax	...	3 15 0	Do.	...	418 14 3	
122 11 8	" Dividends	...	144 1 4	Victoria, 3½ per cent., 1923	...	211 13 8	
7 6 6	" Maudsley	...	31 13 0	Do. 3 per cent., 1929-49	...	175 15 0	
24 18 6	" Dividends	...	28 10 0	Manchester Corporation, 3 per cent.	...	50 17 0	
—	" Asylum Workers' Convalescent Fund	...	61 17 1	New South Wales, 3½ per cent., 1930-50	...	109 0 0	
				Midland Railway Preference, 2½ per cent.	...	239 9 8	
				War Loan, 5 per cent., 1929-47	...	249 3 2	
662 7 9	Balance :—Balance at 1st January	...	3718 1 7		...	1617 0 2	
	Balance of Revenue Account	...	—		...	3077 12 11	3231 5 6
	Deduct:						
	Balance of Revenue Account	£ s. d.	3718 1 7				
	Subscriptions written off	...	39 7 7				
	Investments, depreciation of	...	44 2 0				
		...	153 12 7				
			237 2 2				
3718 1 7			3480 19 5				
£4380 9 4			£4420 10 10				

(Signed) JAMES CHAMBERS, TREASURER.
(Signed) BOLT, GOODFELLOW & Co., F.S.A.A.

FRANCIS H. EDWARDS } AUDITORS.
COLIN McDOWALL }

£4420 10 10 £4380 9 4

REPORT OF THE EDITORS—1920.

The GENERAL SECRETARY (in the absence of Lieut.-Col. LORD) read the Report of the Editors:

As foreshadowed in our report for 1919, the improvement in the financial position of the Association has permitted of a further expansion of the Journal towards its pre-war size, especially as regards the "Epitome" and "Notes and News." We have been able to incorporate in the latter summaries of proceedings in Parliament relating to psychiatric affairs, and under "Educational Notes" to suit the convenience of medical officers the syllabuses and announcements generally regarding the various courses for degrees in psychological medicine.

During 1920 there have been several outstanding and noteworthy contributions of wide interest, as instanced by Dr. C. Hubert Bond's "On the Needs for Schools of Psychiatry," Sir James Crichton-Browne's first Maudsley Lecture, Dr. Menzies' Presidential Address on "The Mechanism of Involutionary Melancholia," and Dr. John Macpherson's "Identity of the Psychoses and the Neuroses."

The Journal sustained a great loss in the decease of Dr. J. Barfield Adams in February, 1920, whose delightful critical studies of Zola's works will be well remembered by readers of the Journal. He was also a painstaking abstractor and did valuable work for the "Epitome."

We are again grateful to members of the Association and others for the assistance given in reviewing books and enabling the Editors to publish an increasingly voluminous and valuable epitome of current literature of psychiatry.

For the Co-Editors.

JOHN R. LORD.

The report was adopted.

REPORT OF THE AUDITORS.

Dr. F. H. EDWARDS read this report:

We, the undersigned, having examined the Treasurer's books and scrutinised the vouchers and receipts, do hereby certify that the revenue account and balance sheet, as set forth, represent a true and accurate statement of the Medico-Psychological Association for the year 1920.

F. H. EDWARDS	} <i>Auditors.</i>
C. F. F. McDOWALL	

The Report was agreed to.

THE COST OF PRINTING THE JOURNAL.

Dr. F. H. EDWARDS drew attention to the cost of printing the Journal and pointed out that it was considerably more than members' subscriptions. The matter was discussed by the PRESIDENT, Lt.-Col. E. WHITE, Dr. C. F. F. McDOWALL, Dr. J. CHAMBERS, Dr. R. H. COLE, Dr. WOLSELEY LEWIS, Lt.-Col. D. G. THOMSON, Dr. NOLAN, and Lt.-Col. J. R. LORD. Finally the meeting adopted a motion by Dr. H. WOLSELEY LEWIS, seconded by Lt.-Col. D. G. THOMSON, that a small committee, consisting of the President, the Treasurer, Lt.-Col. J. R. Lord (representing the Co-Editors), Dr. F. H. Edwards and Dr. C. F. F. McDowall be appointed to inquire into the matter and have the power to invite tenders and to report the result of their considerations at the next general meeting.

REPORT OF THE EDUCATIONAL COMMITTEE.

Dr. A. W. DANIEL read the report:

The Educational Committee have held four meetings during the year.

The number of candidates for the Nursing Certificate is steadily increasing:

For the past 12 months.		For similar period 7 years ago.	
Preliminary	4228		1524
Final	1382		611

There have been four candidates for the Association's Certificate in Psychological Medicine; all were successful.

One candidate for the Gaskell Prize failed.

The most important decision of this Committee during the year was that the conduct of the examinations in nursing of candidates from mental hospitals] in

South Africa should be delegated to representatives of the Association in the Union of South Africa.

During the year the new regulations for the conduct of the examination for mental nurses have been printed, the new syllabus of training has been agreed to and the necessary documents connected with the examination have been approved.

The method of paying examiners has been altered during the year, and a small fee is now paid to the coadjutors.

The Educational Committee have received with regret the resignation of Dr. Shuttleworth from the post of Senior Examiner for those nursing mental defectives, a post he has held since its initiation.

As regards the Gaskell Prize the Solicitor advises the following resolution :

"Now it is hereby resolved by the Council of the Association at a duly constituted meeting assembled, that until further order *in lieu* of the examination qualifications referred to in clause 5 (2) of the said trust deed, the qualification of a diploma in psychological medicine of universities and examining boards having the power to grant medical qualifications registrable in the British Isles and Colonies shall be accepted from candidates for the prize, but that the requirements referred to in clause 5, sub-clauses 1, 3, and 4 shall not be modified in any respect.

It was agreed to.

REPORT OF THE PARLIAMENTARY COMMITTEE.

Dr. H. WOLSELEY LEWIS read the report :

Your Committee has met five times during the past year. Its activities have been much concerned with the Mental Clause of the Ministry of Health Bill, which at the last moment was rejected by the House of Lords. Your Committee has since continued to urge for a special Bill to deal with the treatment of mental disorder in its early stages in harmony with the report of the Association. Your Committee is pressing for important amendments to the Asylums Officers' Superannuation Act of 1909 in its application to the countries of the United Kingdom. Representatives have been appointed to confer with other bodies in dealing with these amendments. In the present state of public affairs the Minister of Health does not, however, see his way to receive a deputation on the matter.

H. WOLSELEY LEWIS, *Chairman*.

R. H. COLE, *Secretary*.

He added that in the present state of public affairs it was, he feared, too much to hope that the Committee could do very much in the immediate future. He moved the adoption of the report.

This was agreed to.

REPORT OF THE LIBRARY COMMITTEE.

Dr. R. H. STEEN submitted this report :

During the past year the Library has been used for the purposes of reference more than in recent years.

With regard to home reading, the number of books issued for this purpose has been about the same as last year.

It has been the custom for many years past to circulate certain journals among the members. During the later years of the war the supply of these became more and more irregular, and since the armistice, on account of labour and other troubles, matters have not improved to any great extent, so that it has been thought advisable to discontinue the subscription paid to two or three of these periodicals.

Members of the Association are reminded that arrangements have been made with Messrs. Lewis's Library so that any book required can be obtained on loan.

The Library Committee wish to state that a sympathetic reception will be given to any suggestions made by members as to the advisability of purchasing new books, or as to any method by which the value of the Library may be increased.

It was agreed to.

REPORT OF THE SUB-COMMITTEE ON POST-GRADUATE STUDY.

The GENERAL SECRETARY read this report :

The Sub-Committee on Post-Graduate Study, etc., has met on four occasions,

the last being in February, 1921. Considerable progress has been made in the elucidation of this important and far-reaching problem, and a preliminary report made to the Council. The Council, on the whole, approved of certain recommendations the Sub-Committee had arrived at, and expressed satisfaction with the progress made. In the course of the discussion with the Council the Sub-Committee received valuable suggestions from various members as to future lines of inquiry, and it was heartily agreed that it should continue its investigations. Since February, however, it has been impossible to gather the members together again owing chiefly to the inconveniences caused by the strike and the very full programme of this year's annual meeting.

The members of the Sub-Committee are as follows: Dr. C. Hubert Bond (*Chairman*), Lt.-Col. J. R. Lord (*Secretary*), Maj. R. Worth, Dr. H. Devine, Sir F. W. Mott, Dr. D. Orr, Col. R. G. Rows, Dr. Percy Smith, Dr. J. Chambers, Dr. E. Goodall, Dr. J. Middlemass, Dr. O'Connor Donelan, and Prof. G. M. Robertson.

JOHN R. LORD, *Secretary*.

I beg to move the reappointment of this Sub-Committee, so that its labours, already far advanced, may be brought to a successful conclusion at an early date. The report was adopted.

MOTIONS INVOLVING EXPENDITURE OF FUNDS.

The PRESIDENT said the Council had recommended that ten guineas be granted from the funds of the Association in support of the Memorial to Dr. V. Magnan, a former President of the Academy of Medicine of Paris and a very distinguished psychiatrist. The Council also recommended that the remuneration of Sir Frederick Mott, as Maudsley Lecturer, be fifty guineas. It was also proposed that the cost of reproduction of the Maudsley Lecture in the Journal should be borne by the Maudsley Bequest, and not be paid for out of the funds of the Association.

The Council's recommendations were agreed to.

Dr. R. H. STEEN, on behalf of the Library Committee, applied under this head for the usual grant of £25 towards the expenses of the Library. In 1914 it was suggested that this £25 should be granted annually, but Dr. Hayes Newington, the Treasurer at that time, said he thought the request should be made annually. He (the speaker) therefore asked for the grant on the present occasion. Very little had been spent this year on the Library, because books had been so expensive.

The PRESIDENT said the request just made was out of order. It had not been included among the Council's business; he asked if it was an urgent matter.

Dr. M. A. COLLINS said it was agreed in 1914 that this grant should be asked for annually; he remembered it very well, but instead of it being regarded as a permanent item of expenditure it was decided that the application for it should be renewed each year.

The PRESIDENT said the matter should have been presented to the Council. There was no urgency, because not only had arrangements been made with Messrs. Lewis, but there was a very good library at the Royal Society of Medicine.

Dr. R. H. STEEN said that as the Council had approved it in the past its grant this year was only a matter of form.

Dr. F. H. EDWARDS moved that on this occasion the request be refused, and he did so in no parsimonious spirit. It had already been shown that there was a deficit, and when there was money in hand it would be time enough to recommend such expenditure.

Lieut.-Col. E. WHITE seconded.

Dr. BEDFORD PIERCE asked whether it meant that if this sum were not granted the Library would be held up for twelve months?

Dr. R. H. STEEN said the Treasurer stated there was a balance of £12.

The TREASURER said the Library had some investments; the Association owed the Library account £12 5s. 8d.

Lieut.-Col. D. G. THOMSON said that this grant should have been brought before yesterday's Council meeting as a matter of courtesy.

Dr. D. BOWER did not think there had been any lack of courtesy on the part of the Library Committee Chairman; he simply overlooked the fact that he ought to have put the item in the report.

Dr. R. H. COLE said that a large amount was spent on books by other scientific

bodies, yet this Association spent but little on books. There was a fine library belonging to the Association, which included that of the late Dr. Tuke, but it had not been added to for a long time. He thought men should be encouraged to use the Library. They did not, because they felt the books they wanted were not there. It would be a pity not to grant the £25 this year; the formal application to the Council was omitted accidentally.

On being put to the vote the meeting decided to grant the £25.

The PRESIDENT announced that the nominee for the third Maudsley Lecture would be Sir Maurice Craig, C.B.E., M.D., F.R.C.P.

DATES OF THE ANNUAL AND QUARTERLY MEETINGS.

The quarterly meetings for the ensuing year were agreed to as follows: November 22nd, 1921, February 23rd, 1922, May 25th, 1922. The annual meeting would be held in Edinburgh during the first week in July, 1922.

The SECRETARY announced that the Royal Wimbledon Golf Club had kindly made honorary members of the club all members of the Association during the progress of the annual meeting of the association.

ELECTION OF CANDIDATES AS ORDINARY MEMBERS.

The PRESIDENT appointed Dr. R. H. Hunter and Dr. B. M. Mules as scrutineers for the ballot.

The candidates were all elected as follows:

A. W. B. LIVESAY, Surgeon-Commander R.N., M.B., C.M.Edin., F.R.C.S. Edin., in charge Royal Naval Mental Hospital, Great Yarmouth.

Proposed by Dr. R. B. Campbell, Colonel Thomson, and Dr. R. Worth.

GEORGE NATHANIEL WILLIAM THOMAS, M.B., Ch.B.Edin., of the Middle Temple and South Wales Circuit, Barrister-at-Law, Assistant M.O., Napsbury Mental Hospital, Napsbury, St. Albans.

Proposed by Drs. L. W. Rolleston, H. F. Bodvel Roberts, and A. O'Neill.

GUY R. EAST, M.D., B.Hy.Durh., D.P.H., Medical Superintendent, Northumberland County Asylum, Gosforth.

Proposed by Drs. H. D. MacPhail, J. B. Tighe, and J. R. Gilmour.

BERTRAM WILLIAM FRANCIS WOOD, M.B., B.S.Leeds, Ministry of Pensions Neurological Hospital, Ewell.

Proposed by Drs. H. Eggleston, R. Worth, and J. Leach Wilson.

PIERCE NAGLE CREAGH, L.R.C.P.&S.I.Irel., Deputy Commissioner, Medical Services (Neurological), Ministry of Pensions, 142, Lexham Gardens, London, W. 8.

Proposed by Drs. R. Worth, G. Warwick Smith, and E. H. Beresford.

RECEPTION OF A DELEGATE FROM THE AMERICAN MEDICO-PSYCHOLOGICAL ASSOCIATION.

The GENERAL SECRETARY said that Dr. W. M. English had just arrived from Canada, and had brought the following letter:

American Medico-Psychological Association.

BOSTON, MASS.,

June 1st, 1921.

DEAR DR. ENGLISH,—It is my privilege to inform you of your appointment by the Council of the American Medico-Psychological Association as a delegate to represent the Association at the annual meeting of the Medico-Psychological Association of Great Britain and Ireland, and to convey to our trans-Atlantic friends a message of goodwill and a desire for closer relations.

Sincerely yours,

H. W. MITCHELL, *Secretary-Treasurer.*

The PRESIDENT said that Dr. English was very welcome, and remarked that the Association was very pleased to see the representative of the American Medico-Psychological Association.

Dr. W. M. ENGLISH, who was cordially received, expressed his gratitude for the reception.

PAPER.

"On the Goldsol Test in Mental Disease." By Dr. P. W. P. BEDFORD, of the West Riding Asylum, Wakefield.

The PRESIDENT said Dr. Bedford had gone deeply into this subject, and his paper showed that it was a matter which was not yet understood. Still, we were not so far behind the greatest investigators as regards the behaviour of colloidal metals. The amount of work Dr. Bedford had put into his paper was astonishing. Evidently all the literature to date had been carefully searched, and all the suggested causes of colloidal precipitation of gold had been reviewed. He did not know whether future investigations would be so much in the realm of organic chemistry as of inorganic chemistry. For example, there was the whole of the range of the reaction of the compounds of iridium, which also gave colour-reactions, and though uranium and other metals did not give such good colour-reactions, he understood all the gold family of metals which gave colour reactions had the same class of reaction, called colloidal suspension. So that it was hopeless, at present, to try to find out the proportion of different albumens in the spinal fluid. The claims of sodium chloride had been disposed of already. But until more was known about the difference between globulin and albumen and about the other bodies, it was almost impossible to come to a definite conclusion as to the causation of either the colloidal precipitation or concentration. Members would feel very much obliged for the paper, and he invited remarks.

Prof. G. M. ROBERTSON desired to associate himself with the remarks of the President as to the extraordinarily good work which Dr. Bedford had done. He had made very numerous observations, and, as the President said, the author had very thoroughly investigated the literature on the subject. The subject was of great interest to members, from the clinical point of view, rather than from that of the physical or electrical, about which Dr. Bedford said so much. The important point was that it formed another and independent test for the presence in a patient of general paralysis of the insane. Before the Wassermann and the goldsol tests were known many errors in diagnosis were made. Dr. Bedford mentioned 25 *per cent.* or 26 *per cent.*, but Southard, in America, followed to the *post-mortem* table a large number of cases which had been diagnosed as general paralysis by every medical officer in the asylum, and in these there were 15 *per cent.* of errors. When Wassermann was investigating his reactions in the case of the cerebro-spinal fluid, he asked the ablest physicians in Germany to send him cerebro-spinal fluid from undoubted cases of general paralysis, and there were, in these, 5 *per cent.* to 7 *per cent.* of errors. With regard to clinical reactions as a guide, he knew one case, that of a distinguished public man, who was seen by three of the ablest physicians, and they all said he had general paralysis and advised him to resign his work. But six months later he was better and had returned to his duties. The use of the Wassermann test had increased the accuracy of diagnosis enormously, so that now there was no serious disease which could be diagnosed with so much certainty as general paralysis. But there were always some cases, perhaps one out of every two hundred, in which in the early stage there was doubt, and now there was the goldsol test, which Dr. Bedford considered even more reliable than the Wassermann reaction of the cerebro-spinal fluid and more distinctive. At any rate, it was the strongest confirmatory reaction we had in the diagnosis of general paralysis. One could draw off the cerebro-spinal fluid and keep it for any length of time and it was easy to do the test on a small quantity of fluid. There was only one "fly in the ointment," and that was the chemical solution was very difficult to make. If all the mental hospitals could be supplied by Dr. Bedford with reliable solutions of goldsol, it would place them in a very strong position in regard to a confirmatory diagnosis of general paralysis. They had been told by their older teachers, like Sir Thomas Clouston and Sir George Savage, that when they diagnosed general paralysis they were pronouncing a death sentence; therefore physicians had no right to diagnose a condition as general paralysis until they had performed every known test.

Dr. R. H. STEEN said that at the meeting at the Maudsley Hospital recently he heard it said that the smallest amount of foreign matter, such as dirt, might vitiate the test, and he gathered from Dr. Bedford that this test was difficult to perform with any satisfaction. He hoped Dr. Bedford would reply on that point.

Dr. R. M. STEWART said he was very glad to have had the opportunity of

listening to Dr. Bedford's paper, in which the author had dealt so lucidly with the technique of the goldsol reaction. His, the speaker's, experience dated from 1913, and his own conclusion was that the test was no particular index of any disease of the nervous system, unless one also took into consideration the other laboratory tests with the clinical findings in any particular case. He would say a word about two curves—the paralytic and the syphilitic. He had found the paralytic curve a constant feature in all cases of advanced general paralysis; in early cases sometimes it had been negative. Moreover the test, even when it gave the paralytic curve, was not pathognomonic of general paralysis; he had found it positive in disseminated sclerosis, in cases of brain tumour, in epilepsy, and especially in cerebro-spinal syphilis. The syphilitic curve, *i.e.*, the curve in which the precipitation was in the middle series of tubes, he had found in only 50 *per cent.* of the cases of cerebro-spinal syphilis, and even then it was only of value when other signs also were present—the positive Wassermann, and so on. A perusal of the enormous literature in America on this subject conveyed the impression that too often the goldsol test failed to discriminate between general paralysis of the insane and meningo-vascular syphilis. It might be argued that, on clinical grounds, one could usually distinguish these two conditions, but he was convinced that was not the case; the tendency in asylums to diagnose every demented patient who had paresis as a subject of general paralysis was too prevalent, largely because the difficulty surrounding the differential diagnosis of general paralysis and meningo-vascular syphilis was not sufficiently emphasised in the text-books. The student was taught to regard as general paralysis a state which presented certain features, such as dysarthria, etc., but what was seldom mentioned was that there occurred, in this disease, a pre-paretic stage, one in which the symptoms might be almost entirely mental, and it was only after the passage of several more months that the underlying organic brain disease became obvious. His war experience had convinced him that in cerebro-spinal syphilis the mental symptoms might precede the physical, and then the recognition of the condition became very difficult. One was dealing with two syphilitic infections in which the outlook was entirely different, and one had to try and discriminate which was going to be general paralysis and which would be cerebral syphilis which would yield to treatment. It was here that he had hoped the goldsol test would have proved of value, but it was disappointing. He would found upon this failure a plea for a more thorough teaching in neurology to those taking up psychiatry. He had himself abandoned the goldsol test for the simpler colloidal-benzoin reaction, which required merely tincture of benzoin and a simple saline solution for its performance.

Dr. BEDFORD (in reply) said of course one needed to be careful in making these laboratory tests, but the tubes did not need to be sterilised; they needed only to be washed out with a bichromate solution. With regard to the test coming out positive in other diseases than general paralysis he had referred to that in his paper. Moore found it positive in lead poisoning, in tuberculous meningitis, and in disseminated sclerosis, and therefore he said in the paper he thought the investigation ought to be carried further. It should be applied when these conditions could be met with at an earlier stage. The clinical differentiation between general paralysis and cerebro-spinal syphilis was very difficult, and when one labelled a case cerebro-spinal syphilis and one got the positive general paralysis of the insane test in it, it did not follow the test was wrong: the clinical diagnosis made in the first place might have been wrong. With regard to the rest of what Dr. Stewart said, he agreed.

THE LUNCHEON.

Mr. Trevor, H.M. Commissioner of the Board of Control, kindly invited the members of the Association to a luncheon at the Café Royal.

At the close of the meal the President said this day was an epoch in the history of the Association. Such magnificent hospitality had not, he thought, occurred before—he almost hoped it would not occur again. (Laughter.) If it did, members could not possibly keep up that nice scientific standard which it was to be expected would be maintained during the next two or three days. A special request had been made that there should be no long speeches, but he was sure the company would wish to drink Mr. Trevor's health for the great hospitality and extreme kindness which all the guests sincerely felt.

The toast was pledged heartily to the singing of "For he's a jolly good fellow."

Mr. TREVOR, in responding, remarked that it was unnecessary for him to say what a pleasure it had been to him to see such a goodly company—a large number of whom he was glad to include among his personal friends—partaking of his humble luncheon. (Laughter.) When the proposition was first put to the Secretary, he, Mr. Trevor, said he hoped it would meet with the approval of the Association. One condition he made was that there would be no speeches, that it should be a merely informal gathering of friends, and that it should be over as soon as possible so that members would be in a proper state of mind to listen to what Dr. Bond was going to tell them.

One serious point had long been on his mind. In the year 1910 his guests were kind enough to make him an hon. member of the Association. It was a kindness which he appreciated most extremely at the time, and each year which had since gone by had heightened that appreciation and his desire to make some public acknowledgment of it. He took it at first as an expression of kindly feeling towards himself, but he also interpreted it as an indication that the Association at any rate did not regard the legal members of the Board of Control as nonentities. However that might be, he assured the company that the legal members of the Board had a very considerable influence, and he hoped it was an influence for good; and he was sure he could say they yielded in no whit to their medical colleagues in their firm wish to do everything possible to improve the lot of the insane, to improve the administration of lunacy where it required improvement, and to do everything as far as they could in the interests of the specialty which looked after the insane, and of all those in whose hands their happiness rested; he referred to the medical and nursing staff.

He would also like to say—and this was another point on which he really felt very deeply—he had been a Commissioner for nearly twenty years, and his visits to the various institutions which he had had to inspect may often have been inopportune, and his criticisms perhaps not very useless. But in the whole course of the period during which he had been Commissioner he had never received anything like an uncivil word from any doctor in any of the institutions he had visited. This was a matter which no one in his position could fail to appreciate.

He thanked the company most sincerely for the way in which they had received the toast, and he hoped they would now be in the mood to listen to Dr. Bond's address. (Applause.)

AFTERNOON SESSION.—JULY 12TH.

THANKS TO THE RETIRING PRESIDENT AND OFFICERS.

Dr. PERCY SMITH said a pleasant duty had been assigned to him to carry out before the commencement of the actual business of the afternoon, namely to move a vote of thanks to the retiring officers. He regretted that this function could not have been entrusted to one of the acknowledged orators of the Association, such as Dr. Yellowlees, or Sir George Savage, but they had passed away—Sir George Savage only recently—and he, the speaker, was the only member of the Association present when Sir George Savage's ashes were laid to rest at Sevenoaks. However, men came and men went, but the Association's work never ceased.

His first reference in this matter was to the retiring President, Dr. Menzies. He thought all members present would agree that Dr. Menzies had been one of the outstanding Presidents of the Association. (Applause.) The address he gave—which took a good many hours to read in the Journal afterwards—was a most exhaustive and stimulating one; and in its author's conduct of the business of the Association throughout the year members had seen an example of keeping to the point, and of carrying on the affairs of the Association with the greatest promptitude.

The Treasurer (Dr. James Chambers) fortunately was not vacating his post. All knew how well he had filled the office of Treasurer in succession to the former lamented Treasurer, Dr. Hayes Newton.

The Editors of the Journal, too, fortunately, would be going on, and it was very

pleasing to see that Scotland and Ireland were still associated with the English Editors; they had not broken off for Home Rule; and it was hoped it would be very long before, at any rate in this Association, there would be any division of that sort. The best thanks of the members were due to the Editors of the Journal for their conduct of it throughout the year.

Then there was the General Secretary. An enormous amount of the burden of work came on to his shoulders. Some years ago he, the speaker, held office for eighteen months, and he found it more than he could do in conjunction with his other work, therefore he gave it up. But Dr. Worth was full of energy and youth, and Dr. Smith felt sure he would hold the helm of the ship for many years to come.

The next officer was Dr. Miller. He forgot when Dr. Miller became Registrar first: it must have been in prehistoric times. (Laughter.) But he was ever young, and the great work he did in connection with the registration of nurses, the conduct of examinations, and so on, would be incredible except to those who had held office in the Association and knew what such meant. The hearty thanks of the Association were due to Dr. Miller, and might he long continue to be Registrar.

There were other officers to mention. The Auditors fulfilled the rather thankless but very important duty of supervising the work of the Treasurer. Then there were the various committees—the Parliamentary Committee, the Educational Committee, the Library Committee, the Post-graduate Committee—and all those had secretaries, and some had treasurers, and they all did an amount of work for the Association, for which members ought to be very grateful. There were also the Divisional Secretaries, regarding whom it must be remembered that the success of the Association was largely due to the divisional meetings. When, some years ago, the question of the amalgamation of various medical bodies to form the Royal Society of Medicine came up, this Association discussed the matter concerning its own union with it. He, the speaker, was deputed to meet the President of the Royal Society of Medicine of that time, and was able to convince him what a large and important medical body this Association was. And it became very evident to the Royal Society of Medicine that, with the Association's Parliamentary work and other activities, involving a good deal of separate initiative, it would be very difficult for this Association to join with the Royal Society of Medicine, therefore the project was dropped. But a Psychiatric Section of that Royal Society was founded, which had not to do with Parliamentary and educational work, as this Association had. He concluded by moving a very hearty vote of thanks to all the officers of the Association for the strenuous work they had done during the past year, coupling with that especially the name of the retiring President.

The vote was carried by acclamation.

The PRESIDENT said it was particularly fitting that the retiring President should be called upon to return thanks for the officers of the past year; he therefore thanked Dr. Percy Smith and the meeting for the vote of thanks just accorded. The reason it was so fitting was, that since the earliest times mankind had desired a figure-head, and it had been noted in distant ages that it was wise to take a figure-head which would not do much harm. Therefore the Association elected him, the speaker, from a back part of the country, and he filled the post of figure-head, but the actual affairs were carried out by the General Secretary, the Treasurer and the Registrar. It followed, therefore, that he had been the least offensive of the officers in that respect, and he had been asked to thank the Association for its kindness in passing this vote of thanks. For the great consideration which had been shown to him during the past year he felt personally very grateful. One had to pass through the chair in order to be able to realise what this Association was to its President, its officers and its Council, what a pleasure it was to move, and not have one's dicta argued. It had been an extremely happy office to him, and he could not agree with the sentiment expressed by his predecessor that he was glad when the time came for him to relinquish it. He was personally very sorry, but all good things came to an end. Therefore he now had the pleasure of introducing to the meeting the President for the next year, Dr. C. H. Bond, whom he now invested with the badge of office. (Much applause.) He congratulated Dr. Bond, and wished him a very successful year of office.

Dr. BOND (the new PRESIDENT) thereupon took the Chair.

PRESIDENTIAL ADDRESS.

The PRESIDENT then delivered his address on "The Position of Psychological Medicine in the Medical and Allied Services" (p. 404).

Sir ROBERT ARMSTRONG-JONES said it was unusual to offer any criticism upon the Presidential Address, and, in the present tropical weather, speeches should be as brief as was consistent with the occasion. He had been asked to propose a vote of thanks to the President for his address—an honour he much appreciated. Dr. Bond had already said it had never happened before that a member of the Board of Control (for England and Wales) had occupied, during his official tenure, the Presidency of the Association. It showed the great respect felt for Dr. Bond that the members of the Board of Control were present on this occasion. It was a very auspicious occasion for the Association, and one which was appreciated, enabling a word to be said of thankful acknowledgment for the attitude shown by the Board towards the Association. Dr. Bond was Emeritus Lecturer in Psychological Medicine in one of our large schools, also an active teacher at the Maudsley Hospital. As already known by members, Dr. Bond was a man of indomitable energy, and it was surprising that he had found time to prepare the address they had just heard. Dr. Bond had referred to the history of psychological medicine during the war, which reflected the greatest possible credit on Sir Alfred Keogh in the war's early days, and which had been continued by that gentleman's wise successor. He, Sir Robert, had been much struck with the demand made by the President for the fluidity, in the public interest, of the present able staff of the many hospitals. It was an interesting and novel point. The early treatment of borderland cases was most important, and was a matter of urgent public importance. The munificence of Sir Ernest Cassell was a sign that it was of deep interest in the public mind. Dr. Bond had referred to the restrictions of the certificate, to domiciliary remedial treatment, to primary and secondary centres, to institutional treatment, to out-patient treatment at hospitals, and to that particularly interesting topic, the varied influence of heredity and an infected environment. He knew that members would read and study this able and suggestive address, which augured a very successful year for the progress of psychological medicine in this country. He proposed the resolution of thanks with great heartiness. (Applause.)

Dr. J. G. SOUTAR said the enthusiasm with which Sir Robert Armstrong-Jones' proposal had been met rendered it unnecessary that he, the speaker, should do more than second it in a formal way, but this he did with great pleasure. It was pleasing to remember that Dr. Bond was a product of this Association, and members would remember with what enthusiasm and vigour he acted as its General Secretary. Dr. Bond did much to infuse new life into it, and from that time onward those who belonged to the Association had felt they had been gainers in strength and power ever since Dr. Bond was associated with them. It was true that the President had risen fast since then, and perhaps somewhat out of the plane he formerly occupied; but he had remained true to his interest in the work which the members were engaged in. For a long time the matter spoken of by Dr. Bond in his address had been discussed, and little by little opinion had evolved towards an adaptation to the requirements of the times. But the point had now been reached at which Dr. Bond, with his large practical knowledge of the application of theories, was able to propose a scheme by means of which there could be carried into effect, if not all, a large part of the purposes for which alienists had been working. That appeared to him to be the immense value of the address. He had the greatest pleasure in seconding the vote of thanks.

The motion was accepted with acclamation.

The PRESIDENT thanked Sir Robert Armstrong-Jones and Dr. Soutar for their kind words, and the members for their approval, which had touched him very much.

PAPERS.

The "Passage of a Barium Sulphate Meal in Ten Cases of Dementia Præcox," by R. V. STANFORD, M.Sc., Ph.D. (Cardiff City Mental Hospital), and EDWIN GOODALL, C.B.E., M.D., F.R.C.P. (Cardiff City Mental Hospital), with the advice

and co-operation of ROBERT KNOW, M.D., Hon. Radiologist, King's College Hospital. (Read by Dr. GOODALL.)

The PRESIDENT said the Association felt very much obliged and indebted to Dr. Goodall for having come all the way from Cardiff, at great inconvenience, as he, the speaker, happened to know, and given such a fascinatingly interesting paper and demonstration. In one respect it was a reminder of Dr. Menzies' address of last year. He asked Dr. Goodall to say, in his reply, whether he had made similar observations in regard to any other classes of mental illness. It was known that bowel stasis was not by any means confined to this particular type of mental disorder.

Sir FREDERICK MOTT desired to express his great appreciation of the piece of work which Dr. Goodall had just placed before the meeting. It was very interesting, and had been beautifully carried out. If the President had not made the suggestion about other cases being treated in the same way Sir Frederick intended to have done so. But he thought the point Dr. Goodall had made with regard to the spasticity of the transverse colon, and the failure of the cæcum to empty itself in such a large proportion of cases, seemed to be capable of correlation with the katatonic condition. He asked whether it was especially the cases which during life showed katatonia which exhibited this condition, and whether Dr. Goodall would explain it by the fact that there was an antagonism between the sacral nerves, which corresponded to the cranio-sacral outflow of the vegetative system and the sympathetic, whether it was an over-action of the sympathetic through the failure to act completely on the part of the sacral nerves. Sir Frederick thought an examination of the sympathetic ganglia and the nuclei in the sacral region in the fatal cases would be a very instructive histological procedure. He had not had the opportunity of investigating many cases of dementia præcox, but in one such case he found that the sympathetic ganglia showed lipoid degeneration, the same as the cells in the central nervous system showed, and he wondered whether the same metabolic failure would not be found in the sympathetic system as was discovered in the central nervous system. The present piece of work was of very great importance. Another point was the following: It was known that many cases of dementia præcox died of pulmonary tuberculosis, and a considerable number of them had intestinal tubercular ulceration, and he asked whether any of the cases observed by the author had died of or developed pulmonary tuberculosis, and whether there could be any correlation with some of the conditions found. He did not think so, but the point was one which was of much interest to raise. He hoped Dr. Goodall would continue these admirable researches, and he congratulated the radiographer concerned on the admirable pictures he had produced. He knew Dr. Knox's work very well, and anything in radiology which that gentleman approved of one could feel the greatest reliance upon.

Dr. W. F. MENZIES added his own congratulations to those of Sir Frederick Mott on the fine radiograms exhibited in this demonstration. He had never seen anything more clearly in his life. The pictures showed very plainly the intestinal nodding, so much so that if a patient were placed at a particular distance from the source of light he could measure those nodes. Attempts were now being made to correlate the nodding of the intestine with the nodding of the heart, *i.e.*, the auriculo-ventricular nodding. It was now clear that the longitudinal and the circular muscles of the intestine were neither longitudinal nor circular, but both were spiral, and that they had a similar refractory period to that of the heart, and it was that refractory period which stopped the continuous action. So the thing went spirally round, each discharge being followed by its normal refractory period. If that refractory period in these dementia præcox cases was due, as he held, to vagotonia, and in melancholics was due to sympathicotonia, the refractory period would be altered; one would show a different nodding length from that of the other. If Dr. Goodall was intending to continue these observations, Dr. Menzies asked whether it was possible to apply any mensurable distance, so that he could measure the nodal periods in these bowels. One saw they were vagotonia because the nodes of the large intestine came out strongly. One could find delayed passage of food through the intestine in either vagotonia or sympathicotonia, and he believed the two branches of the involuntary nervous system acted in correlation; it was not a case of paralysis of one and over-action of the other, it was a question of balance. They both went to and fro—one a little less, the other a little more. In those various states

of the involuntary nervous system, one was a little too much in action, the other was a little under normal. The vagotonia came about through the autonomic system, through the inferior mesenterics, and the sympathicotonia would act only on the nodes, not the muscular nodes, but Keith's nodal points of the intestine—seven of them. He was anxious to know whether there was a clinical distinction between the delay in the passage of bowel contents and the alterations of the refractory period, and whether it had any similarity to the shortening of the refractory period in the heart which occurred in auricular fibrillation and flutter.

Dr. GOODALL, in reply, expressed his thanks for the kind reception which had been accorded to his paper. In reply to the President, the observations were absolute ones; there were no controls as yet as regards other kinds of insanity. He did not doubt the need for having controls. In answer to Sir Frederick Mott, only one of these cases was katatonic; the others were of the hebephrenic type. He had been very much struck with Dr. Knox's statement as to spasticity. That that gentleman should have commented upon spasticity and hypertonicity was very significant in a radiologist. There was no evidence of tubercle in any of these patients. He did not feel able at present to enter into the theoretical points which Sir Frederick Mott raised, but he thanked Sir Frederick for his remarks, which merited attention. He also thanked Dr. Menzies for his observations on nodal periods, and he, the speaker, would remember them with a view to future work.

PAPER.

"Note on the Diastase Contents of the Urine in 120 Cases of Mental Disorder." By EDWIN GOODALL, C.B.E., M.D., F.R.C.P., and H. A. SCHOLBERG, M.B., D.P.H. (From the Pathological Laboratory Cardiff City Mental Hospital, and read by Dr. GOODALL.)

The PRESIDENT said it was somewhat of a feat to hear, associated with the same authors on the same day, two papers of such value and showing such a volume of good work. They showed the fine use to which the excellent laboratories of the City of Cardiff Mental Hospital were being put. This must be an immense satisfaction to those responsible for the enlightened policy in that area. There was another point which he would like to emphasise, though he did not intend to discuss the paper, and that was the duty owed by science to the chronic patients in asylums, not only on their own behalf, but to use the lessons which could be obtained from that clinical material to the fullest extent, as had been done in connection with the present research.

MORNING SESSION.—WEDNESDAY, JULY 13TH.

The President in the chair.

PAPERS.

"The Oxford Clinic." By Dr. T. S. GOOD, Littlemore Hospital, Oxford.

The PRESIDENT said the paper just read was one he had been looking forward to listening to with very great interest, and he had not been in any way disappointed. That would no doubt be the feeling of the members too. Dr. Good had just described a work which had been to him (Dr. Bond) an obsession for the past twelve years. And when he was called away from Long Grove Asylum, just at that moment, in conjunction with Dr. Campbell Thomson, of Middlesex Hospital, they had elaborated a similar scheme, subject to the goodwill of his own Committee and of the Governors of Middlesex Hospital. If it was not given to oneself to do something which one took a keen interest in, it was a compensation to see it carried out in the way it was done at Oxford. War hospital matters had taken the speaker a good deal to that delightful city of Oxford, and on arriving there he found this particular work was going on, and that Dr. Good, with no other initiative but his own, had evolved it and followed it out. He had not done justice to the work in his paper, and perhaps he would allow the speaker to supply some of the deficiency. Some of the cases Dr. Good had been treating were definitely certifiable; it was not a mere question of cases being treated in their early stage; therefore institutional treatment had been obviated for those patients. In visiting one of the big provincial mental hospitals and discussing matters with the

superintendent, the latter showed him, as a matter of interest, the report of his committee (not yet published). Dr. Bond was perturbed by a paragraph in that Committee's report to the effect that they wanted to see this legislation passed "because it would save people having to be sent to an asylum." As he said at the time, in a friendly way, that was not the way to put it, and that the real object was to cut short the illness in its early stage, and so obviate the necessity of institutional treatment, or, if that were impossible, then to avoid certification for a reasonable period.

Prof. G. M. ROBERTSON said he had listened with the very greatest pleasure and interest to this paper by Dr. Good. There could be no doubt that that gentleman had struck out on a more or less new line, and he had done very excellent work. It was work on these original lines by the younger men of the profession when they started out which made for progress in the treatment of mental disorder. At the same time he thought it would be paying a very poor compliment to Dr. Good if one did not ask him certain questions, and at the same time took the opportunity of offering a few criticisms. The first point which occurred to the speaker was that Dr. Good did not say what the cases he was treating were diagnosed as. What was the nature of the cases Dr. Good had in his clinic? Some light had been thrown on that point by the remarks of the President, who said that some of the cases would have been certified, but nothing definite on the point was stated by the author of the paper, though he referred to a certain report of the D.C.M.S. of the district, who referred to the patients as cases of neuroses. If the cases were correctly so diagnosed by the D.C.M.S. of the district, that made a considerable difference to the whole subject. What was attempted was to treat patients showing undoubted mental symptoms, not only neuroses, but psycho-neuroses and the early stages of the psychoses. With regard to the treatment of these cases he understood from the paper that the clinic was held on one day in the week. Those who had had to do with the treatment of psycho-neuroses realised that these cases required a great deal of time and attention. Dr. Good stated he had placed on the list of forms of psycho-therapy, psycho-analysis. That was a very important form, but there was no kind of treatment yet devised which required so much time to carry out as psycho-analysis; it was of no use to give exclusively to the patient less than half an hour at a sitting, and such attention should be almost daily. If the cases reported on by Dr. Good made the extraordinary progress they did from being seen only once a week, he (the speaker) would have said that the amount of psycho-analysis required could not have been great, and the cases could not have been of the severe type to which many members of the Association were accustomed. The clinic presided over by Dr. Good was called the Department for Nervous Diseases; if the cases treated at it were functional nervous cases with a basis of mental symptoms—which, of course, the majority of the neuroses were—then one could understand the success of the treatment at that clinic, and Dr. Good's high recommendation of the out-patient treatment. He proposed to revert to that point later. There seemed to have been a feeling, as evidenced in the general medical press, that psychiatrists had not done exactly what they might have done during the recent war, that in general they had taken a very secondary place to the neurologists. But he wished to point out that the neurologists had had under their care these functional cases of nervous disorder for the last fifty years, but had not recognised them to be functional and of mental origin. It had been the association of the psychiatrist with the neurologist which had brought this matter home to the neurologist. The differentiation between neurology and psychiatry had been most harmful; it had done much harm in the matter of the treatment of mental disorders. But it had done just as much harm to the treatment of nervous disorders. It was to the separation of these two forms of nervous disease that the fact was due that until the war the neurologist did not recognise that half the cases which passed through his hands were of mental origin. Therefore the majority of the cases which had been treated at the Oxford Clinic would appear to have been, largely, cases of neurosis, but that, fortunately for Oxford and for that hospital, a distinguished psychologist was assisting in the care of the neurological cases, and, as a result, they had achieved success with them. He wished next to say a word on the out-patient treatment. If it were true that the cases referred to by Dr. Good were of a simple nature, mainly neuroses, one could understand quite well that these cases would be best treated at home. But if cases were something more than that, if

they were psycho-neurosis cases, and early instances of psychoses, they were far better treated away from home, in a small hospital or a hospital of any kind with wards. Such cases needed a great deal of attention, and this could only be given when they were brought together. He, the speaker, had some nursing homes for cases of neurosis, psycho-neurosis, and the early stages of the psychoses. A medical man patient was sent to him recently who was seen by all the physicians and neurologists of one of our greatest centres of education in this country. He had been ill for nearly eighteen months, and it was finally decided to subject him to psycho-analytic treatment. In the minds of many people there was something wrong in this process, and many of the patient's friends objected. For some reason the patient came under his own care for psycho-analytic treatment. He had not had the time to engage in psycho-analytic treatment, but he had studied the method, and he subjected this medical man—who was very anxious to get well—to a small amount of psycho-analysis; in fact, it was really psycho-synthesis, because he merely explained to the patient what, he thought, was the nature of his disorder. As a sequel, this man, who had been bedridden seventeen months, was up and about and going to luncheon-parties in ten days. Up to the speaker seeing him he had been treated from the physical point of view. Cases of that kind were best treated in a home or a hospital, for only in such a place could they receive the amount of treatment they required. Dr. Good himself said there should be wards in hospitals for the treatment of these cases. Such wards did exist, but not so many as there should be. Among those present to-day was Dr. Carswell, a former Commissioner of the Board of Control in Scotland, who was one of the first to open wards of this character in Great Britain, and therefore he hoped that gentleman would discuss Dr. Good's contribution. There were similar wards in the Royal Infirmary, Edinburgh. The amount of accommodation and the treatment were most inadequate, largely because they had not the benefit of psychiatrists assisting the neurologists, as the Radcliffe Infirmary at Oxford had. Therefore he was much interested in Dr. Good's paper, and he entirely approved of what Dr. Good said as to the need of a combination of neurologist and psychiatrist: the man who had been looking at these symptoms from the mental point of view all his life, and the man who—at any rate among the neurologists at the present day—had been looking at diseases from the organic point of view. It was this combination which would produce the best treatment. Therefore he hoped that in the wards which might be opened there would be provision made for this combination, and that the psychiatrist would not be excluded from his proper place, as, he thought, he had been to a large extent in the past. The President had referred to a point which occurred to the speaker also, namely, the exclusion of certain cases from asylums. There was no reason whatever why these cases should be excluded from asylums. They were as well managed and as well organised as were any medical institutions in this country. It was said yesterday that when the War Office wanted hospitals for the soldiers the establishments they wanted were the mental hospitals, because they found that in them everything was organised and up-to-date. He wished to point out that those who had so much to do with our great general hospitals—and no one had a greater admiration of them than he had—had no idea of the management and the state of efficiency of our mental hospitals, and the sooner they knew, the better. Neither had they any idea that the mental nurses were so efficient and proficient. He believed that the military men who reported on the administration of the various military hospitals formed the opinion that there was no class of hospital where nursing was more efficient than that by mental nurses at mental hospitals. Therefore there was no reason why patients who required treatment should not go to mental hospitals, where everything had been prepared for giving them the best treatment possible. But the difficulty in the way was that at the present time the mental hospitals lay under a stigma—a stigma which must be removed. When that had been done, mental hospitals would come into their own. At the present time these mental cases would go to a general hospital; they would not go to a mental hospital because of the stigma which was supposed to be attached to such, as distinct from the general hospital. He was glad to say that this "stigma" was in process of being removed. All in the profession, especially distinguished members of it, had seen a change gradually taking place, and that change was much assisted by what had occurred during the war, in removing the grossly false ideas which existed concerning mental hospitals. Remarks had been made about them even in

Parliament which were a disgrace to those who uttered them. At the bottom of the stigma was the legal certification of the person of unsound mind. That might have been all right seventy-five years ago, when the public were under the impression that people were put into mental hospitals so that their money could be appropriated. At the present time, however, no such thing existed, and the majority of the inmates of such institutions were persons of very small means, most of whom could not even afford to pay for themselves. He considered that the certification by a magistrate of a person because he was of unsound mind, as if he were an offender, was an outrage to medicine, and it should not be perpetuated any longer. Mental hospitals had the best accommodation which could be provided, and Boards were responsible for them which had been exceedingly generous in the furnishing of them, and as physicians, especially the younger physicians, were showing a keen desire to acquire the higher degrees and diplomas in psychiatry, if the stigma he had referred to were removed, the mental hospitals of the country would soon come into their own, and they would be looked upon as hospitals in the same sense as were the general hospitals, and patients would come for treatment at an earlier and a more hopeful stage. At Craig House more than half the patients came as voluntary patients. Not a single patient, however, could come in as a voluntary patient if he could not pay for himself. The Government grant was only given to those who were stigmatised as lunatics, whereas the rich man could come in at once as a voluntary patient and with less of a stigma attaching to him than if he were certified. That the subject was such an important one was his reason for having spoken so long, and he felt grateful to Dr. Good for having broached it, and congratulated him on the success which had attended his department at Oxford.

Dr. D. BOWER said he was too late to hear Dr. Good's paper, but he would like to say a word in corroboration of what Prof. Robertson said. There was a need for a diffusion of accurate knowledge about our asylums among the public generally. Yesterday, after hearing the President's address, he went to his consulting room, and two ladies were there who had come to see him about a patient in a public asylum, one of the best county asylums in this Kingdom. They seemed to have no notion of what was done for patients in asylums. One of them asked him, "Is any treatment given to lunatics in these asylums at all?" Such serious impressions and reflections could only proceed from want of knowledge concerning asylums.

Dr. J. J. F. E. PRIDEAUX (Cambridge), speaking as one connected with a kind of rival clinic to Dr. Good's, namely that at Cambridge, desired first to congratulate Dr. Good on his excellent paper, because he, the speaker, knew the difficulties to be contended with. He did not propose to enter into the subject of the treatment, but he agreed largely with the author of the paper. The carrying out of psycho-analysis was almost impossible in an out-patient clinic. His own department at Cambridge was called the Psychological Department, and he had psycho-analysed half a dozen patients in the last sixteen months. But he would like to lay more stress than Dr. Good had done on the question of the treatment of in-patients, partly for the reasons which had already been expressed by others, but chiefly because the patients lived such long distances from the department—he covered a radius of some forty miles—and it was necessary to have some sort of in-patient treatment and provision for purposes of diagnosis. The only difficulties at present about the in-patient department at a general hospital were due to the fact that the nursing staff had had no experience to fit them to deal with these cases adequately. And he urged the further plea that the clinic, as they used it at Cambridge, was a much broader matter than the one at Oxford seemed to be. At Cambridge there was an agency which bore the name "The Voluntary Association for Mental Welfare"; it had visitors attached, and they worked very much on similar lines to those engaged in social service, and in association with the clinic. In that way information was obtained as to the home conditions of the patients, their family histories, and these visitors helped former patients to find work when they were cured. The other function of the clinic was that it was of extreme value to the general practitioner, who was often in great difficulties among the poorer classes as to whether or not he ought to certify. In many instances the doctor was unwilling to certify when he should do so, and in others he was anxious to certify when he should not. In fact, the general practitioner generally seemed to have but little knowledge on the subject. A third function of the clinic was in

connection with the school service. At Cambridge it was worked in conjunction with the school medical service, and difficulties in mental cases at the school clinic came up for an opinion at the mental clinic. And the magistrates had taken to referring cases to the clinic for an opinion as to the mental condition of alleged criminals. Also the Cambridge clinic was used as a research centre; they got their material from the clinic, and took this material to the psychological laboratory at Cambridge, where they had facilities for carrying out the necessary research. In other respects he thoroughly agreed with Dr. Good's remarks, and he thought his own experience had been similar to Dr. Good's.

Dr. H. WOLSELEY LEWIS said he was particularly interested in Dr. Good's paper, first because it struck a very hopeful note, and secondly because it had taught him how ignorant he, the speaker, was, because for some time he had been seeing neurasthenic patients—shell-shock patients—at the local branch of the Pensions Board, and he had been asked whether he would start a clinic in Maidstone. From his experience of the patients he saw, he replied that he did not think there would be any use in starting a clinic unless he had an in-patient department attached to it. He said that because the experience he had had of this type of patient seen generally at Pensions Boards was that one must remove them from their home surroundings and general environment, because the one factor in the perpetuation of the trouble was the home atmosphere and condition. In many cases the friends of the patients were worse than were the patients themselves, and those with whom these patients came into contact were the very last who could be expected to give the patients any help in recovery. He could endorse a great deal of what Prof. Robertson said about the mental hospitals. He could quote a case he saw not long ago in consultation, that of a girl suffering from hysteria. The parents were not very well off, and he had to put the case before them in this way. One thing which was essential was that she should be removed from her home. He further told them that if they could afford to send her to a really good nursing home he could probably find one where she could be made well. Failing their being able to afford this, he told them the alternative would be to have her certified, in which case, if she were sent to him, he would undertake to get her well. It was necessary to explain that in order to come to him for treatment certification was essential. This was the course adopted, and she got quite well, and had since remained well. But there remained the one great regret, that in order to get the required treatment she had to suffer the stigma of certification, when she ought to have been able to secure that treatment without any question of a "stigma" arising.

Lieut.-Col. E. WHITE said that after nearly five years' experience as a war office mental specialist—three years in the Western Command and the last two years in connection with the cases which came from all commands—he had had a large experience of these psycho-neurotic cases. He reminded members that in the early stages of the war, before anything definite was known about the treatment of so-called "shell-shock," the patients, when they broke down, were discharged from the army, and were given a temporary pension, which was subject to revision, the men being sent to their homes. They did no good whatever. Many of those patients had now been brought forward and placed in the special neurasthenic hospitals, and were being treated under most unfavourable circumstances due to the long delay in the commencement of the treatment. Many of the patients went to local hospitals and were treated by neurologists attached to them, but made no progress. They were the most difficult cases to treat, *i.e.*, the cases which came only in their later stages for treatment. Afterwards, when institutions such as at Maghull and Bridlington were started, marvellous progress was made with them; indeed in one institution Col. Rows got good recoveries in practically every case; the more recent the case, the quicker the recovery. They therefore came to the conclusion that in-patient treatment—hospital treatment—was the correct method for these cases in order to achieve speedy recovery. When they were at home they were, as Dr. Wolseley Lewis said, under the wrong treatment.

Dr. COLIN McDOWALL regretted that, in consequence of being detained, he was not able to hear Dr. Good's paper, but he had gleaned something of its scope and contentions from the discussion he had heard. One point which seemed to have impressed speakers was that if the kind of case under consideration must have treatment, it was necessary they should be removed from their home surroundings. At present he, the speaker, was occupied with a clinic at Tunbridge

Wells, where he saw a certain number of pensioners; and he wished to say emphatically that he did not think indoor treatment was at all necessary. His view was that the clinics, under the Pensions Board, were doing a great deal of good. At his particular clinic a large number of those who attended would never have otherwise been sent for treatment at all. Looking at the financial side, this meant a good deal of saving of public money. Occasionally organic cases of insanity were brought, but a very large number of functional cases came whose condition had not previously been diagnosed, many of whom had been suffering from four to six years. It was not a very difficult matter to show some definite improvement in cases like those. It was true that while such patients remained under the care of the pensions authority they were a financial drain on the country: they cost, perhaps, two or three pounds per week each. But they got well. Dr. Wolseley-Lewis had referred to Maidstone; he, the speaker, had under treatment for a year a man who came from Maidstone. For some months before coming to him he had been at a rheumatism hospital at Buxton. He suffered, however, from neurasthenia, not rheumatism. This man was now at work. There had been four years' delay in applying mental treatment, and that was probably why it took a year to cure him. He had previously been costing the country £4 a week. At his clinic at Tunbridge Wells they had no beds; members might call the treatment psycho-therapy if they pleased. It was only due to the Ministry of Pensions that someone should point out what it was doing for these cases.

Dr. J. CARSWELL said he had heard a great deal that morning which had given him occasion for serious reflection. He had been amazed at the confident statements and the results which had been secured by Dr. Good and others who spoke, though, he gathered, their sole therapeutic method was what might be termed the psycho-analytic method. Neither his observations nor his reading had led him to entertain the same confident anticipations as the results he had just heard of seemed to imply. But he had an open mind, and he would not prejudice his consideration of the claim so made by any predilections. But he thought he would have some sympathy from his psycho-analytic friends when he told them that from 1904 to 1914, he had personally selected from the mass of occurring insanity in a great industrial population a total of 7,000 patients, all of whom he treated in special wards attached to a general hospital. Of those 7,000 cases, something like 4,000 never went near an asylum, and most of them were discharged recovered. If psycho-analysts would consider a record like that and not ignore results obtained by ordinary methods of treatment they would have the sympathy of members when relating their claims to results obtained by psycho-analysis. The psycho-analysts counted in tens, he himself counted in thousands. They followed a method which had a new nomenclature—he was almost saying it had a jargon of its own. Psycho-analysts were all in the same boat: "Deep answereth unto deep"; echoes went about their ears; everything favoured the suggestion in their own minds that they were the saviours of the medico-psychological world. He had to stand alone; he had to be content with the means at hand. He had to attempt every kind of case—acute mania, melancholia, adolescent melancholia, adolescent mania, puerperal insanity of the confusional type, early conditions of general paralysis, epileptic mania occurring, perhaps, in patients who for years had been able to continue at work. All those types of cases he had treated successfully without psycho-analysis. He agreed with what Prof. Robertson said as to the need for putting the care and treatment of the insane on a fresh basis. To-day he had heard the psycho-analytic method given as a reason for the establishment of psycho-therapeutic wards in general hospitals. But the real justification for the establishment of mental wards for the treatment of mental patients otherwise than in asylums was that it meant freedom. If there was one thing which this branch of medicine wanted to-day it was that in the care and treatment of their patients they should have freedom; and, in the exercise of that freedom, every one of the practitioners of psychiatry would gladly avail himself of wards attached to general hospitals. There was no need to argue the case on any other grounds than that in the exercise of its functions the specialty should be free to exercise the methods which appealed to it as most likely to yield the best results.

Dr. J. G. SOUTAR remarked that after hearing this discussion he was not quite sure he had definitely settled in his mind as to what was right and what was wrong in this difficult problem—as yet unsolved—as to how best to deal with these cases.

He felt sure the extremist on either side must be wrong. When the banner of freedom was unfurled, as it had just been unfurled by Dr. Carswell, all felt they would like to follow it. Still, in regard to the treatment of those suffering from mental disorder there was a disastrous period of "freedom," which resulted in very serious consequences, and required that very restrictive legislation should be introduced, with the object of doing justice to the patient. That time must not return. It must be remembered that the person who was of unsound mind was not in the same position as was the person suffering from pneumonia, scarlet fever, or chickenpox. He was not in a position to know whether he was being properly attended to or not. There must always be some legal protection for those persons who were in that state of mind. It was true that at the present time a very large number of persons had to be certified in order that they might have the benefit of the treatment they required. That, however, should not be. It was absolutely wrong. But, short of the degree of freedom desired by Dr. Carswell, he thought much might be done, and ought to be done, to make provision for the treatment of many patients. It was work upon which they, as an Association, had been engaged for a long time. The President, in his address on the previous day, showed, in a very interesting and useful way, how far it was practically possible not to attain to their ideal, but to approach it to some extent; and that was all that any one generation could do. Each generation must be content to do a little towards the end in view, to make a little move, and leave it for the next generation to move on too. That had been the history of all progressive work. The clinics which Dr. Good had described to-day had given a practical demonstration that the ideas entertained theoretically by alienists could be carried into practice, and with very good results. In a county neighbouring Dr. Good's the speaker had the privilege, for two years, of conducting a small clinic entirely confined to ex-soldiers. He did not know that he could say there was anything very special done for those patients beyond what he had been accustomed to do for patients for many years past. What was done might be briefly summed up as an intensive individualising of them. There were various ways of doing this—spoken of as methods—such as suggestion, persuasion, etc., all of which had been employed for ages past in the treatment of mental cases. So long as the patient had some insight into his condition one had to help him towards a still further insight into it. He had seen very good results, not only in these cases, but also in the voluntary boarders who had been treated in this country for a long time past. Therefore he felt that the experience of voluntary boarders, in registered hospitals, and the larger experience in clinics which members had had, justified the claim that opportunity should be given to the general mental hospitals of the country to have patients coming to them in a voluntary way. He had a dislike for the word "stigma," which was constantly bandied about when speaking on this subject. The constant repetition of it by medical men was apt, by suggestion, to keep the idea of a stigma in the public mind. He did not himself know what the "stigma" was. There was no stigma held to be attached to a person who suffered from pneumonia, and he could not see why such should be considered as attaching to a patient whose disorder happened to be of the nervous system. With regard to the question whether bed treatment should be given, he believed that many cases required bed treatment, though in only a small number in clinics of the kind Dr. Good spoke of was in-patient treatment necessary, except for the fact that the patient's home might be a long way from the clinic. But he did not agree with Dr. Good in what he implied, rather than actually said,—that a patient being treated as an in-patient was made to feel that he was ill, and that this was undesirable. He, the speaker, thought it was a good thing that the patient did realise that he was ill; he liked patients to feel that they had come to him for that very reason, and that the anxieties, hesitations and distresses he suffered from were simply manifestations of a disordered function for which he required treatment. By getting the man to recognise this one had progressed a long way towards his successful treatment. In some cases bed treatment was very important, in others it was not. One had to exercise freedom in this respect. The mental physician should have means available to treat patients on the lines he considered to be best in each particular case. He emphasised, in conclusion, the words he used earlier in these remarks, that intensive individualising in the treatment of the patient lay at the root of the successful dealing with cases of psychosis and psycho-neurosis.

Dr. GOOD (in reply) thanked members for the way in which they had received his paper, and in that he included thanks for the way in which he had been attacked—for that was what it really came to. He was only another example of what occurred when a man tried to move a little forward. In the discussion the term "psycho-analysis" had been used, and he had been accused of being a psycho-analyst. But he had not used that term; he used the term "analysis." He did not know what "psycho-analysis" meant to the speaker; did it mean that if he used the term "psycho-analyst" to describe himself, he was a Freudian? Or if he used the term "auto-augnosis or anagogic analysis," he was a Jungite? What was analysis? It was trying to get to the bottom of something, and a particular group of men were being blamed because they were trying to get to the bottom of something. Freud was, in his opinion, a genius; it did not matter whether one agreed with him, for truth would be proved by time, and when Freud discovered the laws of association, and when he worked with Breuer, and when he found out his cathartic method, Freud got something from what was called the unconscious. Jung said the unconscious was a "unawaridness." The view he, the speaker, had expressed was his own view, even though it might be a wrong one; but speakers attributed to him views they themselves held, views they had projected upon him. He had been accused, rather indirectly, of being against the mental hospital, but that idea must have been due to his lack of skill in writing his paper, a task he did not relish, therefore he asked that the blame for his having contributed a paper should be laid on Dr. Bond, the President. He had been at a mental hospital and connected with nerve work for twenty-six years, and for three years before that he was at various forms of nerve work. He might be wrong, but he had held the view that if one pretended one was a neurologist and one was not a psychologist, one was like a man who looked after the wires of a telephone, but did not understand the mechanism of the instrument. Some members of the Association seemed like the people who said, "Yes, there is the telephone, but there is no voice at the end of it." He maintained there was a telephone and a voice, and he, and many more, were out to discover what the voice had to say. Prof. Robertson rather complained that he, the speaker, did not give the diagnosis of every case he spoke of. That was true. Prof. Robertson himself said he had not had time to practise psycho-analysis, though he mentioned one patient whom he psycho-analysed for ten days, and then said a case could not be psycho-analysed if he were treated only once a week. But he, the speaker, did not say he only saw his patients once a week. What he said was, that lack of time and other factors prevented one analysing every case. A neurosis seemed to be some condition for which the cause could not be found in the body mechanism. It had something to do with thought, and if that were so, a psychosis was only a further stage of what was at present called a neurosis, and he could not see any essential distinction between the two, except in degree. Until the public saw there was some hope in these conditions being treated, sending them to an asylum would appeal to them as something a shade worse than going to prison. His activities were being expended in the same area as he had worked in for many years, and the clinic he had described had gradually evolved. He was not criticising the mental hospital, but he asked that the men who presided over the mental hospitals should go outside and be on the staff of a general hospital; it was better that alienists should see that it was only by working with those staffs that progress would be made in the treatment of mental disorder. Every general hospital ought to have a psychiatrist on its staff. If he had given the diagnosis of all his cases he would not have been able to keep his paper within reasonable limits.

Prof. G. M. ROBERTSON pointed out that phobia was a very simple form of psychosis; hundreds and thousands of persons suffered from phobias and consulted physicians because they thought they were going out of their minds. If a large percentage of the cases dealt with by Dr. Good were phobias, that fact would diminish the value of the work done there. All he suggested in regard to diagnosis was an indication of the general type of cases treated by Dr. Good at the clinic.

Dr. GOOD, continuing, said that many of his civilian cases were those who, in his opinion, would have otherwise been very soon in a mental hospital. At the clinic he had treated cases which he regarded as certifiable.

"Psychological Medicine in Relation to Industry." By C. S. MYERS, C.B.E., M.D., F.R.S.

The PRESIDENT said the paper was a very interesting and stimulating one. He had had his own say on the subject in his address on the preceding day; and so he would not say more now than that it did not seem right that a body of men could rule out in this way their stricken fellow creatures and co-workers. Arrangements should be made to cater for those men, and dilute, if need be, physically sound labour with the unsound.

Dr. J. G. SOUTAR expressed the indebtedness of the Association to Mr. Myers for having brought before the meeting this very interesting subject. Psychiatry was in touch with every possible activity of the human being, and it was important to recognise this fact. A point raised by the author was as to whether there should be special training for such practitioners, and at what particular age these men should specialise. Nothing could be so bad as that a specialist should not be trained as a general physician first.

Dr. G. A. AUDEN spoke as to the position of the certifying factory surgeon, remarking that his view had generally been that such an office was a redundancy. The office was created in 1844, at a date when there were no Public Health Acts and no official circulars, and then the choice in regard to overseeing lay between two persons—the parson and the local doctor. Factories were springing up in areas which were, or had recently been, rural, and it became necessary to appoint someone to carry out the Factory Acts of 1833, 1844 and 1847, and as the only available person in most cases was the local medical practitioner, the choice fell upon him. The growth of legislation had included provision for the appointment of large numbers of factory inspectors from the Home Office, and the elaboration of the work of the Public Health services had gradually reduced the work of the certifying factory surgeon, and placed it more and more in the hands of the local health authority. Therefore the factory surgeon now had little more to do than examine children in regard to their fitness for particular employment, *i.e.*, if a child was proposed to be put to a particular class of work he was examined as to his fitness for it; if he were moved to another kind, another examination was made. This meant that the number of separate examinations was extraordinary. The late certifying factory surgeon in Birmingham told him he made 14,000 examinations of children every year, and for the sum of sixpence per child that examination was likely to be quite perfunctory. There were perhaps cases in which the examination by the certifying factory surgeon had proved to be of real value. He had seen a child with a blind eye passed as fit for spinning work. He had no desire to be simply a destructive critic, but he thought there should be a closer relationship between the school medical service and the certifying factory surgeon. The school medical officer had already got the information which the certifying surgeon hoped to get when his turn came with the child, especially if the children had attended the ordinary and continuation schools. Some might ask whether the information obtained by the school medical service was not placed at the disposal of the factory surgeon. That had not yet been managed at Birmingham, and though post-cards were sent to factory surgeons, in no year had there been fifty replies. With regard to juvenile labour and advice as to choice of occupation, under the Employment Act, 1910, that was under the local education authority, and many of the more progressive of those authorities had done much under the Act; they had the means of bringing together all the salient facts which were of importance in determining the fitness of each for individual employment. It had, however, frequently fallen to him to examine children who had been placed in, or who had chosen, employment, and who, from physical or mental reasons, were unsatisfactory.

Dr. W. M. ENGLISH (Canada) said that in his country this matter had not progressed as far as it should, but they had started the examination of mentally-deficient children, who heretofore had been compelled to attend at the ordinary public elementary schools. School physicians were now being appointed, who worked together with the teachers, and were able to suggest the placing of certain children in special classes. He hoped that later the industry aspect would be developed in his own country. In the United States they were, he believed, somewhat ahead of Canada in this matter.

Dr. MYERS, in reply, said it was evident he did not make his meaning clear in regard to trade unions; he meant there should be some kind of examination as to men's fitness to carry on their work, and when speaking of their fitness he meant their knowledge, just as no one could be allowed to practise medicine

without passing a proper examination; similarly in regard to the law, to architecture, and so on. He agreed with the remarks of Dr. Auden, but much of this kind of work was necessary, and it needed mental qualification. The more he saw of such work, the more he was confirmed in his view that the men who undertook it required to be mentally trained. Even school clinic physicians must feel how much better it was to have a mental qualification. His plea was for a wider extension of psychological medicine merely on the preventive side of industry, in order to secure the best possible conditions for the people's work, and to avoid, as far as possible, worry and anxiety, which led to functional, perhaps to organic, mental disorder.

"Phantasies of Childhood and Adolescence as a Source of Delusions," by E. MAPOTHER, M.D., M.R.C.P., F.R.C.S. (Long Grove Mental Hospital), and J. E. MARTIN, M.B., B.S. (Hanwell Mental Hospital). (Read by Dr. MAPOTHER.)

AFTERNOON SESSION.—JULY 13TH.

DISCUSSION.

The PRESIDENT said that when he saw the case at Middlesex Hospital he did not think it would be the subject of a paper at a medical meeting. There was a statement in the paper which he (Dr. Bond) wished to contradict in part. It was to the effect that the speaker advised the case to be certified with the view to being sent to Long Grove Mental Hospital, and that the patient should be taken first to Marylebone Infirmary and thence to Long Grove. The fact was he (the President) reluctantly concluded that the wish of the Hospital to retain the case and treat it there could not be maintained, and that mental hospital treatment was needed. He went out of his way to write a letter to obviate the necessity of this girl going into the Poor-Law infirmary, as that was unnecessary, there being no urgency. Yet custom prevailed, and the girl went to a Poor-Law infirmary on her way to Long Grove.

Dr. WILLIAM BROWN congratulated the authors on their extraordinarily interesting paper; it was one of the most interesting he had heard for a long time. The description given made it clear that in certain classes of cases the "memories" which the patients brought up were not accurate memories at all. So-called memories should be accepted with great reserve, and in every case an attempt should be made to verify from other sources what was gleaned from the patient. That was one of the weaknesses of present-day psycho-therapy, that at present the need of confirmatory evidence was not sufficiently emphasised. In every other science in which experiments were carried out, control experiments and confirming processes were carried out, and everything was closely scrutinised. The tendency of analytic work nowadays seemed to be in the other direction—that of getting more and more from the patient in an uncritical way, indeed encouraging lack of criticism in the patient's mind, and that in itself seemed, by a curious reaction, to tend to produce a lack of the critical faculty in the mind of the analyst. It was true that Freud himself, before Jung made his suggestions in the matter, had discovered that many of the "memories" of his patients were fantasies, not realities. But the President deserved the credit for emphasising the true significance of this. And yet Dr. Bond, like Freud, attached great psycho-therapeutic value to pseudo-memories or phantasies, and used them to explain the beneficial results of analysis. If he had followed Dr. Mapother aright, he gathered that in his case, and in other cases of psychosis, memories and pseudo-memories had very little to do with the causation of the disease. The disease was caused in various ways: either through the hereditary factor, through shock, through physical or mental strain, and that, as a result of that and of the failure of adaptation to the present on the part of the patient, earlier fantasies or pseudo-memories had the opportunity of coming to the surface of the mind and making themselves apparent. There was a diminution of the general intellectual control, and these phantasies, under analysis, showed a definite rationality, not so much from the patient's point of view as from that of the outside beholder; but that they were not efficient factors in the disease—they were effects, not the causes. The evidence in favour of that view seemed strong in many cases of psychosis. But in the more approachable cases of psycho-neurosis one must admit that analysis—the recall of earlier memories and phantasies—produced a very pronounced and beneficial effect, which was inde-

pendent of any suggestive effect, independent of any autognostic effect, independent of the increasing of the patient's insight into his own condition and increasing the suzerainty of his intellect over the rest of his mind. Freud and his followers had definitely proved the course and the efficacy of these pseudo-memories, and said these should be accepted, and one should pass on to the consideration of how best the beneficial result could be explained. The beneficial result varied from patient to patient, and in the case of a psychosis this was often very small. In some instances, possibly, taking the patient back much into the past might do harm instead of good. The simpler cases of the war neuroses, as dealt with in the field very shortly after the mental trauma proved, he thought, almost like an experiment in the laboratory, that past experiences when dissociated from the mind under certain conditions did persist in some form, though it was difficult to say in what form, and it would be necessary to avoid too popular an explanation of it, and to consider it from the point of view of the general explanatory systems of psychology. He thought dissociated emotional experiences did persist in some form and continued to affect the mind, and that if these emotional experiences were brought back into a more normal relationship to the main personality the patient definitely benefited. He admitted that was a matter of degree, and in regard to some of the psychoses the degree might be slight, but it was very important that its value should not be under-estimated. On the other hand it, of course, did not exclude other factors as partial explanatory elements of mental disease, and also as factors of cure when acted upon. Undoubtedly treatment directed towards the present mental condition of the patient was of great importance, as also was prophylactic treatment in the matter of the social environment of the patient. But, without accepting the Freudian or the Jungian doctrines, one could at least say that this theory of continual working of earlier memories, especially if they were of emotional nature, also earlier phantasies, was a proved fact in psychology.

Dr. DEVINE desired to pay his tribute of praise to the authors for this paper, which was the finest and most balanced contribution on the subject he had heard. He also agreed with the opinion that there was no necessity for special technique in regard to mental cases. He had tried, to the best of his ability, to study a large number of cases psychologically in a tentative way, and he had never used the free association method, because he felt that in an asylum one had a chance to work very objectively. The patient revealed to the physician very much what the psycho-analyst tried to get out, and, as Dr. Mapother said, it was best to let the patient tell about himself, and then one got Nature's revelation of the case, not an artificial one. He also agreed that one did not find in one's cases proof of the theory of repression, as apart from the proof of something not being remembered, or which it was the wish to forget. He thought Dr. Mapother was quite right when he said this girl did not wish to tell what she knew all the time; it was what he (Dr. Devine) found very much in his own cases. It was that the patient did not wish to discuss certain matters with the doctor, and the whole process of negativism seemed to be a shutting away of those memories. He would give a greater significance to the content of the psychosis than Dr. Mapother did, in so far as he thought the content of her psychosis revealed, to an extent probably greater than the author would say, the nature of the cause of the disorder. The speaker thought the whole organism had to be taken into account in explaining these cases. This patient's case was described very beautifully, including her physical inferiorities. Dr. Devine assumed that she met with certain difficulties, physical and mental, before she broke down, and that the latter was because her libido, or life impulse, was defective; she was under-developed. Hence she went back into fantasies owing to her diminished capacity for adapting to the claims of real life. In a case of insanity, as in the one he was himself to describe that day, there might be various causal factors, but one could attribute it to a definite biological, perhaps inherent, defect of the organism, and the whole psychosis was the outcome of a specific form of inferiority. Thus the fantasies in a given case were important in respect to their content; they indicated the special direction in which the individual was biologically inferior. The matter was, however, a difficult one to discuss, and his object in rising was to say how much he appreciated the paper.

Prof. G. M. ROBERTSON desired to associate himself with the expressions of opinion which had already been uttered in regard to the very excellent paper

which had just been submitted by Dr. Mapother. It was a stamp of paper which it would have been impossible to have written ten or a dozen years ago, and it represented the last word which could be said on the subject at the present time. If one looked backward and thought of the descriptions of mental disease of Maudsley, Savage and Clouston, one realised that there was no account of those late authors which in the least resembled the description and the account which members had just listened to. It could be admitted that alienists now possessed an insight into the nature of mental trouble such as was never possessed fifteen or twenty years ago. The case had been so thoroughly presented and worked out in every respect that one could deal with many points in connection with it. Dr. Mapother had more or less described his views on the nature of insanity and of the ætiology of mental disease, as well as his ideas on treatment. He, the speaker, did not propose to go through all the subjects referred to in the paper, but would speak on what apparently struck Dr. Brown as well as himself, *i.e.*, the ætiology, as it might be called, of the disease. As the author said, the ætiology in any case of mental disease was very complex, but he thought members could agree in saying that the condition practically always started off with a hereditary predisposition, as Dr. Devine had said, *i.e.*, with some biological defect. He, the speaker, thought that, wanting this, the individual, in ordinary circumstances, would meet with the troubles of life and overcome them. Secondly, he thought there was, nearly always, some form of physical disorder. Although at the present time members and others were greatly interested in the psychical condition of these mental cases, the work which had been done, and was still being done, on the physical aspect of mental disorder was equally important. He thought there must always exist a physical disorder in these cases, which tended to weaken the mental powers and to cause the overthrow of the mental balance, and so the morbid conditions were able to assert themselves. This physical disturbance, sometimes called the somatic preparation, was not always entirely physical, such as an intoxication; it might be emotional, and it was probably through the action of the endocrine glands in this case. But there was a physical disturbance of the nervous mechanism which predisposed to disordered action. And one saw the psychosis developing lastly, and the author laid stress upon this, that the nature and the content of the psychosis were two different subjects. Owing to the experience of the individual, certain mental characteristics asserted themselves, and although two persons might be subjected to the same hereditary influence and to the same physical disorder, if their mental experience was not the same, the content or the form of the psychosis was totally different. Lastly, one came to the practical point, namely, the treatment of the condition. There must be a combination; one must take a broad view of the situation. One could not affect the heredity except from the eugenic point of view, but the physical condition must be restored as far as possible, and there was no doubt that various physical measures, drugs and vaccines, with improved hygienic conditions if the physical state was improved, enabled the state of the brain to recover from its disorder. At the same time, with regard to the psychical aspect, he thought the amount of help which could be given varied enormously in different cases. Dr. Brown laid considerable stress on the help which could be given by psychic means. He, Dr. Robertson, said there could be no doubt that in a large number of instances that was so, and he believed that in the cases which were already recovering as a result of the restoration of the physical balance, an analysis and the presentation of the mental condition to the patient might be beneficial. At the same time he felt bound to admit that in definite psychoses, especially in the more acute forms, little or no benefit could result from psychic treatment. But, of course, that was no reason why psychic investigation should not take place. It added enormously to the interest of the psychologist in the case to make this investigation, and it enabled the symptoms of the patient to be understood and interpreted by the physician, and, when improvement had begun, it enabled one to help the patient to overcome his abnormalities. He thought that, in the more acute stages, little or no good could be done from this point of view, though help might come from it at a later stage. Another important point was the following: Many of the commoner psychoses met with were recoverable, and they were recurrent, and the knowledge obtained might help the physician during the stage when the patient was well. During the period of recovery the physician might help the patient to understand his difficulties, his worries, his repressions,

his disordered emotions, in such a way that it acted as a preventive, and might stave off a relapse in the future.

Dr. MAPOTHER, in reply, said he wished to acknowledge, in one sentence, the kind remarks which had been made by all the speakers; especially did he wish to express his appreciation of the President's observations on the paper, and to say that without Dr. Bond's encouragement and suggestion the paper would not have been written. Still, everyone who had worked with and under Dr. Bond knew that when incited by him one did most things. He had the good fortune to be one of the original members of the staff at Long Grove, and he did not think anybody who shared that good fortune with himself would ever forget the influence Dr. Bond had on all the staff, and they would feel that any success they might hereafter achieve would have been due to him. With regard to the remarks of individual speakers he was glad Dr. Brown agreed as to the need of confirmatory evidence; that was one of the chief points sought to be made in the paper. He also agreed as to the tendency of the psycho-analytic method to encourage fantasies. His own feeling was that the recurrence, in a psychosis, of either remote events or fantasies connected with the long past was due to their being in harmony with the mood of the present. But he agreed also with Dr. Brown when he said that he thought these fantasies in themselves had an effect, but he thought that effect was rather a secondary one. If a simile were permissible, he thought of it in a similar way that one conceived of a sequestrum in a case of osteomyelitis; long after the disease proper had ceased these sequestra might persist, and he thought the reaction to the fantasy might be the cause of the persistence of the psychosis. At the same time he thought the argument from results in neuroses, as well as in psychoses, was very much overdone—that it was riddled with fallacies, that the whole of medicine was littered with the remains of theories which were based on the same claim. It was not, perhaps, fair to the psycho-analytic school to demand production of their cases; it was difficult to produce cases. Reference had been made to the war cases. Some of them illustrated one fallacy, and that the simplest—that the improvement existed only in the mind of the person who claimed to have brought it about. Cases used to be presented as having undergone remarkable improvement, but it was sometimes an improvement which he himself had not been able to detect. One did not often get the opportunity of seeing other people's cases, but one was able to do that in the war hospitals. In many other cases the improvement was rather symptomatic, and the lasting tendency was still continuing, though perhaps the patient's interest or attention might be diverted in another direction. In many cases there was an improvement as a result of such treatments, but the improvement was really attributable to something else; there was something which Déjerine called "the therapeutic effect of kindness," and he, the speaker, believed that was very great. Another thing, and a very important one, was the patient's will to recover. That was a very important factor in all cases, and in private practice it certainly was evinced by the patient seeking out the psycho-analyst. During the war the great desire was to get out of the Army, and in asylums the same thing applied. In his own experience it had been very frequent to find that it was with commencing improvement one heard these stories—stories which could not be obtained at an earlier stage in the case, for often the story was too horrible for the patient to narrate. He saw that exemplified in a case in the previous week. It was the case of a woman who told a long story of sexuality all her life—all kinds of sexual misdemeanours. She was an alcoholic case, and this came out at a certain stage in her illness. In the earlier stage of it she was too agitated about the whole matter, but last week she came to him and unburdened herself of it, but this occurred only after improvement had commenced to set in. She was better afterwards, and a day or two ago she regarded it much more lightly. He thought that, apart from physical treatment, there was much to be done for these patients in the way of psycho-therapy, but it was mainly in getting the patient to adjust himself to existing relations, difficulties in patients' married lives, etc., and common-sense advice on such subjects had been the ordinary practice of psychiatrists, and he did not think there was much to be learned about that from psycho-analysts. He had been glad to hear Dr. Devine's agreement with him on two matters, namely, the absence of therapeutic effect from listening to the patient's narration, and the absence of a need for special technique. He agreed with that gentleman, too, when he spoke of the girl's libido being deficient. He, the speaker, believed

that was merely an expression, in psychic terms, of a physical defect, and that was a point he himself tried to make in the paper he read when he spoke of the disease of the girl's ovaries and the stoppage or slowing down of her intellectual and physical development thereby, and the consequent retardation of growth and tendency to arrest of mental development, also the fixation and regression all essential features of the defective libido. He agreed with Prof. Robertson as to the all-importance of hereditary predisposition. He thought it was true, not only in the functional psychoses so-called, but it was certainly a very important factor in any psychoses, even when there was a grossly physical cause superadded, such as alcohol or some infection.

PAPER.

"Legislative Restrictions in connection with the Treatment of Incipient Insanity." By Dr. WILFRED COROLEU, Secretary of the Royal Academy of Medicine, Barcelona (see p. 470).

The PRESIDENT said the Association really felt much obliged to Dr. Coroleu for coming all this way to deliver his paper. It was true that the author suggested the title of the paper, but to be quite frank, his (the speaker's) object in saying "Yes" had not been exactly attained, because he was casting about to find some good place in the world which had more or less perfect lunacy laws. He had hoped the Association might have heard that they were not so rigid in Spain, in some ways, as we were here. However, it was not so. Spain had even more early treatment deterring than our own, because in order to secure institutional treatment a person must be dangerous, and between the certifying doctors was thrust another pair of doctors—municipal doctors—who decided whether the patient was to get treatment or not. However, his search was not in vain, because he discovered that in South Africa there was passed, in 1916, a Consolidating Act, called the Mental Diseases Act, 1916, which embraced nearly the whole of the wishes of alienists in this country, with the exception that it only allowed of institutional treatment without certificates for the very short period of just under fifty days.

Lieut.-Col. D. G. THOMSON said that while members were very grateful to Dr. Coroleu for his interesting paper, there did not seem to be in it much material for discussion. They had been interested to hear of the practice and the laws in the ancient Kingdom of Spain, and he, the speaker, would like to hear what was the practice in these matters in the Spanish-speaking countries of the world. He had seen reports from one or two of the South American mental hospitals, which gave the idea that they were not so much behind in these matters as they might be imagined to be. He referred particularly to Chili. Were the laws in that country based on the Spanish principle, which seemed to be the general principle throughout the civilised world? Or were they more on the lines which the President had just shown had recently been established in South Africa?

Dr. COROLEU (in reply) said the Spanish-speaking countries in South America were, in many respects, more enlightened than Spain herself. Spain was the mother, and her offspring had made more progress than had the parent; there they took up Spain's work and improved upon it.

PAPER.

"The School Medical Service in Relation to Mental Defect." By G. A. AUDEN M.A., M.D., F.R.C.P. (see p. 475).

Dr. J. J. F. E. PRIDEAUX said it was difficult to pick out of this paper the points one would like to discuss. One of the questions dealt with by Dr. Auden was as to whether intellectual and temperamental deficiency always went together in the same person. He gathered that the author considered this was the case. But the speaker would not have thought that temperamental deficiency was a necessary accompaniment of intellectual short-coming. Dr. Auden also spoke of testing the general capacity for control; and the speaker would like to hear what method he used for testing the control, because it was very important. The question came up again later on when discussing the emotional reactions of the feeble-minded as a class. He (Dr. Prideaux) objected strongly to the way in which the term "emotional" was used. He did not think the feeble-minded experienced, subjectively, very much emotion, and he believed that idiots suffered no emotion at

all. He had based his views on experiments which had been carried out. But there was a general fall in the emotion, in a true sense, using the word in the sense of a subjective experience—an experience in the presence of some situation, and which facilitated, or opposed strongly, some distinctive impulse. That was now the best way of using the term "emotion." As generally used, the word signified something impulsive. As one went down the scale, one found these people were much more impulsive, and therefore he had tried to get some accurate work on this question of control of movements. Many tests had been done with the idea of showing impulsiveness. With regard to the special innate defects, among which was word-blindness, did he consider such should not be certified under the Epileptic and Defective Children Act? He, the speaker, had had much to do with schools for defective children, where, from time to time, these defects were found, and, as far as he could see, unless they were admitted to a special school there was nobody who would educate them. Another question related to certification was, Should one certify cases of pure temperamental deficiency under the Epileptic Children Act? That was a subject still in dispute. It seems that these children could not be educated at the ordinary school, and for that reason they must be certified under the Act, although not truly defective. Another point, which was one of difficulty with the authorities, was as to what "defective" meant. There were children who could not be educated at a special school, *i.e.*, apart from moral imbecility. At Cambridge, in connection with the Diploma in Psychological Medicine, there was a special allowance made for those who were studying mental defect, and six months' experience as school medical officer was allowed if it could be shown that the candidate was examining cases for mental defect.

Sir ROBERT ARMSTRONG-JONES said he had enjoyed Dr. Auden's paper very much, but on one point he did not agree with the author, namely, as to the slightness, or inadequacy, or insufficiency of the term "moral imbecility." That he regarded as a most important class of mental deficiency. These children had a "good shop window"; they were high up in their class at school, which class was generally the "ex-seventh," and yet no punishment was able to keep them from doing wrong; they would throw the cat on to the fire, steal, tear books, pinch other children, tell lies—in fact they would do everything which was morally wrong. He maintained there was a moral sense, not in the way of a fifth or a sixth sense, or the muscular sense, but a sense of the moral fitness of things, and hence he considered it was a very proper term to use. Out of the Physical Deterioration Committee inquiry the only distinct recommendation which was made was with regard to that. School medical officers were appointed in consequence of the evidence given before that Committee. It was the usual thing to decry a Royal Commission, the statement made being that nothing came of it, but out of the Physical Deterioration Committee's Report this appointment was definitely made. He did not propose to travel over the ground covered by the paper, but he did not understand what Dr. Prideaux meant by temperamental deficiency as opposed to intellectual backwardness. Temperamental deficiency was far more difficult to define. At Earlswood he was medical officer with that class for two years, and later he was recalled there as medical superintendent, which post he kept six years. He had also seen privately a fair number of children who came under the category of moral-sense deficiency, including a Harrow boy, an Eton boy, and boys from Charterhouse and from elementary schools, and he felt the definition "moral imbecility" which had been given was an excellent one to apply to these children who were backward in the moral sense.

Dr. J. F. BRISCOE said he thought they should be satisfied with such a term as "moral dwarfism": it was a term which had been handed down for generations.

Dr. F. R. P. TAYLOR asked whether he rightly understood the author to say that most moral defectives were intellectually defective also. If so, he, the speaker, disagreed. He had had considerable experience with these mental defectives, and he had found that "moral defective" was a very good term. These subjects were quite up to the standard intellectually; some, indeed, were what would be called the bright boys of the school.

The PRESIDENT said he would like to lay a little more emphasis than he had done in his address on the very real importance of that work. He had a feeling that the general body of this Association were lacking in cognisance of the amount of work going on both in this department and in the police-court field—crimi-

nology ; and it was only when one began to open reports of either government or local bodies, which did not ordinarily come into one's own run of work, that one was struck by the fact that here were two realms of work containing a vast amount of material, a great part of which was the psychiatrist's own, and it was being done by men whom the latter did not often meet, which was a pity. The Association was very proud to contain a certain number of medical officers of schools. It was, he thought, a pity some arrangement could not be come to for having a standing committee of members of this Association, including primarily those gentlemen, with others interested, and members of the associations to which school medical officers and others belonged. Such a standing committee would be, he thought, of great mutual advantage. The author had spoken of the prominence of the school medical officer and the training ground for his work, which was the school itself. Doubtless this is true, and up to a point rightly so. But the field of psychological medicine is wide, and to be a master of any one division of it demands at least some clinical experience in all of it.

Dr. AUDEN (in reply) said, in regard to the test of control, "the proof of the pudding was in the eating," and the only test of control was when the child controlled its actions. He did not think control could be tested properly or accurately, because it was under such an intricate set of circumstances—those which were included in the term "environment." With regard to the question of moral imbecility, he was looking at it from the point of view of psychology rather than the use of the term in the Act of Parliament which had been quoted, though he was coming more and more to feel that what seemed to be perverse conduct was due to a mal-adjustment to environment. The experience of institutions for the feeble-minded in America went to prove that if moral imbeciles came under care early, many of them could be, in time, taught to conform with the ordinary canons of an ordered society, and they might acquire, though perhaps late, that subjugation and that subjection to the group-mind which was necessary for the stability of society.

PAPER.

"Expiation Mechanism in a Case of Schizophrenia." By HENRY DEVINE, O.B.E., M.D., F.R.C.P.

The PRESIDENT, in thanking Dr. Devine for the paper, said this was an admirable description of a highly interesting case. Members had had the advantage of reading already a part of the case, and the author had done well to bring it up to date.

Dr. J. CARSWELL said he did not feel competent to follow the line of reasoning of the author, and probably there were others in the audience in like case. But he supposed one would not be far wrong in assuming that the interpretation in this present case, and the presentation of it, had been largely influenced by the teaching of Freud. It had always occurred to the speaker that Freud was particularly fortunate in the time at which his theories were presented—at any rate in the date at which they were given to this country. Probably some were getting a little tired of looking into test-tubes and into microscopes to find an explanation of human conduct, even of insane human conduct. At the time Freud came along with his teaching, the profession here had reached nearly a dead-end in pathology in regard to these states. And whatever else Freud had said—and much of what he had said he, the speaker, could not understand—it could be said that at any rate Freud had projected a new idea into our methods. So that, instead of looking into nerve structures and the influence of the fluids of the body on nerve tissues, to find the explanation of morbid feelings and ideas they ought to look at conduct itself as an explanation. And so Freud sent the minds of psychiatrists back to the experiences of life, and so far as the Freudian school had done that for the speciality, he thought it had performed a great service. He did not know that they were quite prepared to apprehend what was meant when they were told they were to look back to the unconscious, or to the subconscious; but gradually they were beginning to admit that there were past experiences which were at any rate material in the way of formation of habits of thought and forms of conduct, which had been entirely forgotten by us. That was plain psychology, before the days that Freud taught it; but that authority brought it into this field, so that in order to explain some mental cases it was necessary to hark

back to the individual life-history. Having done that, there was, clearly, a great field for work in explaining the mechanism by which these patients had evolved their experiences in the past. Probably the chief value of such a paper as Dr. Devine had to-day read was to direct attention to the mechanism whereby those lost impressions and past experiences came to be effective in existing conditions and in an awkward and fantastic guise. There was no one who had had experience of mixing among men of great varieties of temperament who had not come across men with extraordinary habits of mind, but who were by no means insane. He knew a gentleman with the religious temperament, who did much good work; he was an inoffensive person and an acceptable companion, and normal in regard to the ordinary standards of the world. Yet he was known to have done some acts which appeared to be sinful in the company among which he was accustomed to move, though in other spheres of environment these would have been regarded as ordinary. But this man was so distressed by these acts that in his diary were entries such as "I did so and so, and I feel very sorry," and next day there would appear the entry "I bought" (naming a religious book) "and presented it to So and So"—that was his expiation. He, the speaker, did not doubt that millions of people did that sort of thing every day of their lives. They had to adjust themselves to the human environment in which they lived, moved and had their being, and when they did anything which did not correspond with that standard, they sought and obtained relief in expiatory acts. That such should happen in the insane was to be expected, and the mechanism by which such a state of mind was reached was well worthy of careful scrutiny and attention, such as Dr. Devine had given it in this paper. While saying that, he reserved all views as to the application of the Freudian interpretation of cases of systematised delusional insanity and other forms of obsessions, but that was quite apart from one's high appreciation of this paper.

Dr. W. BROWN said he had very much enjoyed Dr. Devine's paper. It was of extraordinary interest, and one felt that, as the President said, it was only one chapter in a long and interesting novel. Cases like that were better understood if one could relate them to similar cases, and the difficulty here was in finding other cases of the same extreme nature and sufficiently akin. While Dr. Devine was reading his paper, he, Dr. Brown, was trying to think of cases of types similar among the patients he had recently treated, and it occurred to him that a good analogy was provided by one in which there was a hatred of dirt—mysophobia—which one found in many patients. Recently he had the opportunity of analysing such a case in which there was a great fear of infection. This fear had broken out at the age of puberty; it was then resisted. Later it fell into abeyance and broke out again after a time, under the stress of a love affair. On the second occasion it became more extensive, and spread over a larger area of the patient's life, resulting in her taking a longer time in getting up and getting herself ready in the morning. She would always be using thoroughly clean towels, and her life became a burden to her and to her relatives. Such a case had close analogies to that which Dr. Devine related in his paper; there was a tendency in the mind for a reaction formation to occur when an impulsive tendency was stronger than normal. The patient tried to react to it, and reacted in an excessive way, and the effect of the reaction seemed to be to stimulate the original impulse to greater and greater activity. In the case he had just mentioned it turned out to be an excessive interest in her own excretions, an interest felt in early life, which produced a reaction formation, and the excessive repressive tendency produced an excessive desire for cleanliness, as manifested in a washing mania at eight years of age. It was more serious when it took the form of a fear of tuberculosis, and especially a fear that she might carry the infection to others. So that in Dr. Devine's case there were certain sadistic tendencies, which Freud considered to be primary, and there seemed to be some evidence in favour of that—tendencies towards cruelty, towards overpowering people, inflicting pain upon them, and especially upon those whom the patient loved. That had been felt to be out of harmony with the rest of the character, and so had called out a reaction tendency, and this was the origin of the expiation. This, in the nature of the case, became stronger and stronger. One was irresistibly reminded of the analogy of the electrical condenser, in which there was a small charge calling out an induced charge of an opposite kind, and that

charge called out intensifying the original charge, so that there was a stronger and stronger bipolar charge on two sides of the dielectric. Here also one saw an effort at self-cure, an effort which was doomed to failure. The mind moved straight on in an irrational way; it feels there is a certain impulse or tendency, feels that it was not in harmony with the rest of the mind; then the mechanism of malevolence came in, reaction occurred, and the patient was so swept along by the actions and reactions that he never stopped to consider what was going on within him. The further he was carried from the normal, the more difficult was it for him to come back. But, as a result of experiences in analysing patients, one could say that this part could be traced in analysis, and the patients were relieved. He agreed with this particular line of explanation which Freud gave. In cases which the speaker had analysed himself, he had found that on going back into the patient's past and enabling him to retrace it and see the mistakes he had made in rushing to the opposite and giving himself up to the quasi-mechanical working of his mental forces, and showing him other ways out than that of crude negation, submission, etc., there was pronounced improvement. It would be very interesting to see a following out further of Dr. Devine's case, and watch what therapeutic effect would be obtained as a result of further analysis. In spite of the patient having been ill a long time, he thought the analysis was working out so accurately that one might expect pronounced improvement. That prompted him to ask the author one question, *i.e.*, what degree of improvement in the patient's condition had Dr. Devine reached to date as a result of his analysis.

Dr. J. CARSWELL, in further remarks, said Dr. Brown's narration of his case suggested that he, the speaker, might mention a similar case which he treated long before psycho-analysis was heard of in this country. The only way to usefully discuss these cases was to have control cases put alongside them. Many years ago he was asked to see an elderly lady who had not left her house for years. When he arrived she declined to shake hands with him, and it was a long time before she would consent to do so. And she would not allow people to come into the house, the explanation of both of which refusals being fear of infection. She was clever, and had considerable means. When she was ill practically everything was at a standstill; it was difficult to get along with her, and her house was the home of a recluse. Not having the benefit of a knowledge of psycho-analysis, and being merely a physician who trusted to the older methods of diagnosis and treatment, he diagnosed gout, and treated her for that. And she got well, and kept well so long as she was on a suitable diet, and so long as gouty manifestations were treated. She gave dinner parties, and lived until her eightieth year.

The PRESIDENT said he felt, with Dr. Carswell, that these lessons in expiation or compensation were going on in hundreds of people, and perhaps no one could altogether acquit himself of some such process; he personally did not think he would wish to, as he found them most useful. Dr. Devine's case was of twenty years' duration, and it showed the value of long-continued observation in chronic cases. He made that remark because of statements sometimes made in papers that it was only recent and new cases which required much attention. He was opposed to that; chronic cases often afforded the best possible chance for study.

Dr. DEVINE, in reply, said Dr. Carswell had stated that what was presented in the paper was a Freudian interpretation of the case; but he, the speaker, wished it to be understood that such was not quite the case—it was the patient's own interpretation. It was a purely objective study. The patient did not speak intimately for a year, and was partially inaccessible. Suddenly he spoke, and Dr. Devine made a complete note of what he said, without influencing him in any way. He, the speaker, did not look out for anything in particular, and he did not anticipate anything. He did not start out to prove any theory, and what he did find expressed he had never met with before. He had not had a good result in this instance, and scarcely anticipated one. But they had an advantage over therapists who dealt with recoverable cases of neurosis, in so far that suggestion was entirely eliminated. This was not a case which he had created or imagined; it was as much a fact as was the man's face, and it was entirely uninfluenced by the speaker. Therefore he thought it was rather an important case, in this way—that coming in this purely objective way it was surprisingly confirmatory of the basic principles of Freud, and that was a valued feature of the case. Dr. Brown had brought up an excellent example, and, as Janet showed

one got an expiation process in psychasthenics, and Freud showed it was met with in neurosis, and here it occurred in a psychosis. It was met with, too, in mythology, in the Bible, and in children, and he thought it was a very natural thing to reveal, for what was insanity but an exaggeration of normal reactions? Unfortunately the patient was not better; he had an intense hatred of the speaker and of everybody else. He had only got four smiles out of him in two years, but once he said he liked talking to him. Under the mask-like faces of these cases there was intense life and mentality of a very interesting kind. In conclusion he wished to say what a pleasure it was to read this paper before Dr. Bond, to whom he owed so much.

MORNING SESSION.—THURSDAY, JULY 14TH.

The President in the Chair.

PAPERS.

“Chronic Bacterial Infections in Dementia Præcox.” By W. FORD ROBERTSON, M.D. (Pathologist to the Scottish Asylums).

The PRESIDENT regretted there was not a larger audience to hear this not only interesting but very important paper. He thought those who were present might well feel commiseration for those absent who had missed so good a paper. The Association's gratitude was the more due to the author for having come so great a distance at,—as he, the President, happened to know—at no little personal inconvenience. In corresponding with Dr. Robertson he said that what the Association would like would be some sort of lead and guide as to the importance of each psychiatrist having a competent knowledge of bacteriology, not of its technique, because that all could not attain to, but of its principles and of the very great importance of the relation of psychological medicine to bacteriology, or, rather, of the relation of psychological medicine to general medicine, as expressed by the link of bacteriology. And he thought Dr. Ford Robertson had done that to the full, and in a very helpful and convincing way.

Dr. J. MIDDLEMASS said he rose to offer a few remarks only because he was requested to do so by the President, not for any special qualification he felt he possessed to discuss Dr. Ford Robertson's interesting paper. Probably all present would concur in the President's expressed regret at the paucity of the audience, and he would like to think the cause assigned by the President was the correct one, and that it was not due to apathy or lack of interest in the subject brought forward. He himself was not a bacteriologist, but he knew sufficient of the subject to be well aware that the amount of time which had been necessary to prepare this paper and to go through all the experiments and investigations involved must have been very great. He wished to thank Dr. Ford Robertson for all the trouble he had taken in coming here to lay before the Association his very interesting calculations and conclusions. He was glad to note that the author, at the outset of his paper, did not claim that bacteriological infections were sufficient to explain all the symptoms which occurred in the cases he had described; he stated, rather, that he recognised in all his cases a multiple causation. It would be admitted that in matters of controversy the *via media* was the ideal one; but when one was engaged in any particular investigation, and one seemed to have struck a particularly fruitful line of investigation, one's judgment was apt to be warped, and ideas were apt to be pushed further than they should go. All had heard about psychogenic causes of many diseases, and an interest in the present paper was that the author turned the matter on to another equally important line of investigation to explain many mental symptoms; and it would probably be found that the real explanation of many mental diseases and symptoms was, that there was a combination of various causes. One great merit of this paper was that the author brought another factor to notice, and that an important one. Another satisfactory feature was that Dr. Robertson did not limit his investigations to the cases of dementia præcox—the subject he specially set out to deal with. The first part of the paper contained a reference to a large number of patients who were not the subjects of dementia præcox, and he, the speaker thought that

anyone who had to do with a statistical investigation of causation must recognise that before any satisfactory conclusions from an investigation could be drawn from a series of mental cases, there must be investigation of a large number of cases not suffering from mental disease at all. That point had been emphasised again and again on the part of those who were writing papers on statistics; but it was one which mental specialists were apt to forget. Before one could assign any particular factor as an important cause in the production of mental disease, it was necessary for him to ascertain the influence of that factor in those who did not present symptoms of any mental disease at all. That showed the value of Dr. Ford Robertson's method in directing his investigations to a large number of cases outside dementia præcox. But he would ask Dr. Ford Robertson to consider further the necessity for investigating cases who suffered from no mental symptoms at all, in order to ascertain whether the bacteria he had told the meeting about occurred to any great extent in these cases. The importance of this factor would largely depend upon the results of such an investigation. Dr. Robertson instanced a large number of cases investigated by him who were suffering from neurasthenia, which might be regarded as a closely allied symptom to a psychosis. Another difficulty he found in the way of a complete acceptance of the author's statements—and he knew Dr. Robertson would not accept the criticism in a spirit of hostility—was in understanding why these anaërobic bacteria were able to exercise such an apparently powerful influence in producing symptoms. He always understood that the lymphatic fluid of the body, and particularly the intestinal tract, was practically free to obtain as much oxygen as was required, and one of his difficulties was to account for the growth of these organisms under anaërobic conditions. In some of his cases the author instanced the occurrence of anæmia as one of the concomitant symptoms. If anæmia existed there was no doubt that in these cases there would be a smaller supply of oxygen than in healthy people, and that might be one of the favouring conditions of the growth of anaërobic organisms. Another difficulty he had was in understanding how it was one could get aërobic and anaërobic strains of the same organism. Perhaps the author would be able to tell the meeting how it was one could get practically the same organism grown under such different conditions. A further detail of the paper on which he had been reflecting was, that there was such a multiplicity of mental symptoms apparently caused by the same factor—the bacterial growth and the absorption into the system of the toxins they produced. Dr. Robertson had already said that many cases of neurasthenia, of insomnia and inhibition dementia præcox were produced by the presence of these organisms and their toxins. That was not a very serious difficulty, because one knew there was a great multiplicity of mental symptoms in different cases which, to all appearances, were produced by the same factors; in fact the author went on to emphasise what Dr. Clouston so often referred to, that mental disease was a unity. It was, Sir Thomas Clouston said, a multiplicity of symptoms, but, in its essence, it was practically one disease. Another thing which he thought psychiatrists would find of great importance and interest in regard to the cases which the author had described was to obtain subsequent histories. One felt, in reading many surgical and other papers, that one would like to know the subsequent history of the case, say, two or three or more years afterwards, after a certain operation was performed or a certain course of treatment carried out. It was not sufficient only to cure the actual attack, but one would like to feel that it had removed from the patient the possibility of subsequent attack, or, should a subsequent attack supervene, that a similar course of treatment would bring about a cure again. If at some future time there could be accessible a statement of the subsequent history of the cases now narrated, he was sure the arguments Dr. Robertson brought forward would be thereby much strengthened. One conclusion which could be drawn from the paper as a whole was the very great importance of having some laboratories to which alienists could have recourse in the more elaborate investigation of the causation and treatment of mental disease than could be carried out themselves in their small laboratories. Dr. Ford Robertson was himself the head of an ideal conjunction of asylums for the support of an investigation laboratory, and many years ago the speaker did his best to try and inaugurate a similar scheme in the North of England. Unfortunately it was not legally possible to do that, but he thought that since the passing into law of the Mental Defectives Act there was greater hope that such a scheme might be established. He was sure that if they

had a laboratory in connection with the University of Newcastle, to which alienists could have recourse in the way Dr. Robertson had put before the Association to-day, it would represent a material gain. He felt that however much trust one might have in what Dr. Robertson had put forward, they who were engaged in this work would like to have the opportunity of carrying out a similar investigation in their own patients. At present they had very little facility for it, and that was one of the things one could legitimately urge in support of having University laboratories where mental cases could be investigated; it was a system which might with benefit be extended over England as well as Scotland. The President had referred to the Diploma in Psychological Medicine, and to the fact that in some of the Universities the course of training required to obtain that Diploma required a very prolonged course in bacteriology. In Newcastle University, which granted the Diploma, that had been found to be one of the great drawbacks to candidates who might think of entering for this distinction; they were required to attend a six months' course in the subject, and that involved attendance twice a week for six months—a difficult thing for an asylum like his own to arrange for, though it might be much easier for asylums which were situated close to the University. However, the subject was now under consideration, and he thought the solution of the difficulty might lie in removing this compulsory attendance at the course of bacteriology for the first examination, but making it a special subject for the second examination. Undoubtedly bacteriology was a subject which many asylum medical officers might wish to prosecute, and which it would be very useful for them to study, and if they were anxious to take up that study it might be arranged by including it as a subject in the second examination. He tendered his personal thanks to the author for his interesting paper, and he hoped it would lead to a useful discussion.

Dr. R. H. STEEN desired to add his thanks to those of others for the paper. He would like to ask Dr. Robertson whether he had correlated his work with the work of McCarrison, who found different organisms in the intestine which caused endemic goitre and also exophthalmic goitre. The late Mr. Robert Farrant, whose death all deplored, examined the *fæces* of a number of cases of dementia præcox at the City of London Mental Hospital, and the result, he regretted to say, was *nil*. Dr. Farrant found some aberrant forms, but further than that there was no result. At that institution a number of cases of dementia præcox were treated with thymol, with the hope of killing these aberrant bacilli, but there was a negative result.

Dr. ENGLISH (Canada) said he had listened to the paper with very great pleasure. He regretted he was not an expert bacteriologist himself. For this work he depended upon a man who had been assigned to him in part service. So far their reports only extended back a couple of years, so that the material was not voluminous enough to base statistics on. Dr. Robertson's paper showed he had reviewed a tremendous amount of work, and it had been a great pleasure to him to hear it.

A MEMBER (name declined) said there was one point on which he would be glad to have further information. In all these cases of infection or contagion there was a local source—at any rate that was the present-day belief. Even in the specific fevers, such as scarlet fever, there was a local source of infection; and by attacking that local source, even if the disease had developed, the disease could be modified. In the cases of dementia præcox, with the small amount of information given, one was led to look upon the pharynx and the nose as most likely sources of local infection. In the cases quoted to-day by Dr. Robertson he had laid special stress on the intestinal conditions, and the speaker would like to know whether the author looked upon the intestinal infection as the primary seat, or whether he did not think it came about secondarily to a primary focus in the nose or naso-pharynx. There were two ways of attacking the malady: one was by means of antitoxin treatment after the condition had developed, and the other was by bestowing attention on the likely or probable seat before regular symptoms had developed. In dementia præcox there must be huge infection, for even in ordinary people the mouth and naso-pharynx were very septic. The introduction of septic matter into the peritoneal cavity led to definite intoxication of the spinal cord and to the development of organic changes very like those in locomotor ataxy. It had been said that the intoxication occurred from the peritoneal cavity along the lymph spaces of the nerves. There was not much information available on the pathology of dementia præcox, but Sir Frederick Mott had demonstrated definite changes in the basal ganglia; and in that disease a large number of the symptoms—the

physical ones particularly—pointed to the basal ganglia involved as the optic thalami. That seemed to confirm the speaker's view that probably the throat or the posterior nares might be the source of infection, because the infection was then very near the basal ganglia, and it had not far to travel along the nerve. He did not think the question of infection from the nose had received much attention. Many years ago—before he had himself taken up mental diseases—he was investigating lead-poisoning. Those present would know the cases which were called saturnine encephalopathy; these cases came on rapidly in people exposed to lead, especially those with a neuropathic tendency so exposed, and he then concluded that the poisoning probably occurred by some direct route. He had been interested to look up the anatomy of the subject, and he found that Quain's *Anatomy* stated that the lymphatics from the nose opened directly into what was then called the subarachnoid space. If there was the condition of nose so commonly seen in subjects of dementia præcox, and it was so easy for that infection or intoxication to pass up through the lymphatics into the skull-cavity, he thought that was a very likely source of infection. And in it diphtheroid bacilli seemed to play a rather important part. His own experience in bacteriology was unfortunately limited, but he recently had the case of a very unstable neurotic girl, who developed rheumatism of the post-scarlatinal or child-like type, and the sudden onset and the irregularity of the symptoms pointed to malignant endocarditis. The blood was examined, and a diphtheroid bacillus was the only one which could be cultivated from the blood. The treatment was devoted to attacking the throat as the possible source of the endocarditis if the latter was the correct diagnosis. When the bacteriologist found the diphtheroid bacillus he laid special stress on pushing antiseptic treatment of the throat. He understood from that pathologist that the commonest channel of diphtheroid infection was *viâ* the pharynx. He would be glad to hear the author's views on the points he had raised.

Dr. FORD ROBERTSON said that bacteriology in its application to mental diseases had become a special branch; the orthodox bacteriology of the text-books did not carry them far enough in the direction in which they wished to go. He had recognised in his paper that the evidence of the importance of these infective disorders in dementia præcox was incomplete; the next step was to investigate and treat a long series of cases. This he proposed to do. He agreed with Dr. Middlemass that it was necessary to take all the pathogenic factors into account in cases of insanity. He was well aware of the importance of the psychogenic factors, but so far he had left their study to others. The special importance attached to anaërobic bacteria was, no doubt, novel to many of them. The evidence of the neurotoxic action of the anaërobic streptothrices and diphtheroids was now too strong to be set aside. That some species of common aërobic bacteria could assume an anaërobic habit of growth, and even become incapable of growing under aërobic conditions, was a statement that was also rather unorthodox, but the accumulated evidence was unassailable. Many of the negative results of intestinal investigations in cases of dementia præcox were probably to be accounted for by the fact that anaërobic methods had not been used. He had not correlated his work with that of McCarrison, and would make a point of doing so. He attached far more importance to the selective action of bacterial toxins upon special elements in the nervous system than to the localisation of the infective focus. It was quite possible that the infections he had described did not start in the intestine, but higher up. This was almost certainly true, at least, of the pneumococcus and *Streptococcus pyogenes* infections. He thanked the meeting for the encouraging reception given to his paper.

PAPER.

"Change of Phase in the Psychoses." By THOMAS BEATON, O.B.E., M.D., F.R.C.P.

The PRESIDENT said Dr. Ford Robertson had looked at the question of dementia præcox from the bacteriological point of view, and it raised a great feeling of hope in one's mind as to the possibilities of treatment. So also did Dr. Beaton's paper. The latter showed that chronicity did not necessarily mean dementia, using that word in the sense of irrecoverability. It explained many worries of diagnosis. It helped him, personally, over the very case which Dr. Mapother so fascinatingly put before the Association. That case, when he saw her at Middlesex Hospital,

was so truly typical of what was known by all as a confusional form, with delirious symptoms, that the occasion was taken to gather in some students for the purpose of conducting an informal clinical demonstration, the opportunity being too good to be lost. Yet later on that case was regarded as of the dementia præcox type. As Dr. Beaton had shown, that did not mean that either was wrong. At the end of his paper his remarks went far to explain what the old teachers used to emphasise, how intercurrent pyrexias did sometimes stimulate recovery, and that was part of the reason why thyroid tablets used to be given and pushed; also the clearing up of long-standing mental symptoms in furunculosis and tuberculosis cases. It brought to his memory a case he had known many years, a man with symptoms conforming to what is now termed paraphrenia. In all his experience he had not known a patient so persistently and daily maintain an abusive manner, directed towards him. He had hemiplegia, and never quite recovered power of movement, but on coming round from it he entirely changed in his attitude. He had not forgotten his former attitude, and his apologies for his former behaviour were most abject; the change of phase in him was very vivid.

Dr. J. CARSWELL remarked that he would not like this excellent paper to pass without at least saying how much he had enjoyed hearing it; the excellent clinical study had been most refreshing. And the manner in which the clinical aspects were adjusted to the pathological theory was so splendidly done that probably many would hesitate to follow in extemporaneous speech lest they should fail to do justice to so excellent a presentation, with the atmosphere so often fugitive when one wished to get right down in an intimate way with one's subject. And another thing the paper did, namely, to direct the thoughts of the listeners to an aspect of mental disease which, he thought, text-books universally failed to give to the student and practitioner. It was that if one was to call the abnormalities mental disease at all, they must conform to pathological laws, if those laws were right. There could not be a pathological law applicable to heart affections and not also to brain affections. The impression he got from the paper was the following: Taking the analogy of a heart affection, a man had rheumatism, or endocarditis. He recovered from the endocarditis with disabled cardiac valves. Then new processes were set up of a compensatory character. All that was called a heart affection. But the secondary and sequential conditions which ultimately led to failure were in the nature not only of compensation, but they obscured the real deficiency from which the patient was suffering. It was so with many of the mental cases which gave rise to differences of opinion, particularly those in the stage of mental confusion. Perhaps Dr. Ford Robertson and pathologists might be able to say why it came about that one case went through its confusional stage and recovered, while another case was followed by a sequential condition which could not be called confusion, and cannot be rightly called dementia, and, as Dr. Beaton showed, might all be cleared up by another attack of acute infection, setting up a confusion. These secondary changes gave to the course of a mental disorder the suggestion that came from the ordinary study of medicine, an illustration of which he had tried to present by referring to the case of the heart. The more the Association got studies presented to it like Dr. Beaton's, the more there would be a clarifying of views, not only as to the pathology of insanity—he did not mean the tissue changes—but the doctrines which explained the clinical symptoms, and would also help to interest the young men whom one did not find so keen to go into asylum work. An awakened interest would probably be aroused when it was realised that the wards of mental hospitals were busy with clinical studies.

Dr. BEATON (in reply) thanked Dr. Carswell for the very kind way in which he had received the paper. There was little to discuss in it, and he was not surprised that he had not been able to awaken the necessary cerebration to enter into such a vague subject. It was simply a matter of clinical experience, and the reason he thought of writing it was, the very grave practical difficulty he had recently had. He was repeatedly being asked to diagnose early cases, and he did not think it could be done. It might be all very well to talk about early stages of dementia præcox, but they could not be diagnosed. One did not know what phase a particular case was going to pass through, or what was likely to be the ultimate condition. He was very glad the attention of the meeting had been drawn to the text-book side of the matter, because the difficulties did not appear in those works; people read text-books and then came to mental hospitals asking to be shown the types of disease, and in the case of early types it could not be

done, and the visitor did not seem to understand the necessity of waiting until a case developed further—until it had passed through several phases and began to settle down into one of the types. He regarded those types as secondary adjustments: they were the resultant of what had been occurring before. He did not think the confusional phase would be of much practical value in a chronic case of long standing. The whole argument was, that confusion occurring fairly early would break up the recently-acquired sentiments much more completely than it would break up the previously acquired sentiments, and if a chronic case had been going on for many years there was not much left of the personality except those sentiments, and it was not very probable that any adjustments would occur. With regard to the two types of melancholia patient, he thought what had been said represented a common experience; the melancholic patient was found to be full of remorse or of self-pity; the melancholic person was as an instance of reaction to environment, and when he had remorse, it was a reaction which depended upon something within. Therefore he thought that the self-pitying one, in whom there was hostility to environment, was the one most likely to readjust himself to social conditions, because his condition was dependent to a much greater degree upon environment than upon internal change. There could be a change from the remorseful state to the self-pitying one, and it was a newly awakened interest in environment which brought that about. He felt grateful for the discussion.

PAPER.

"The Problem of Prevention in the War Psycho-neuroses." By BERNARD HART, M.D., M.R.C.P.

The PRESIDENT said the Association was again fortunate in hearing a very stimulating paper.

No discussion took place because Dr. Hart was unavoidably unable to remain longer.

AFTERNOON SESSION.—JULY 14TH.

Held at Springfield Mental Hospital. The President in the Chair.

PAPER.

"Mental Hygiene and Prophylaxy." By Dr. HENRI COLIN (Paris). (See p. 459.)

The PRESIDENT said that by the kindness of Dr. Colin, members had enjoyed the opportunity of listening to a most interesting paper. If he were to attempt to enter into a discussion of the subject, either in opening or closing, he might easily absorb twenty minutes, and on that basis he assumed that two hours would be required for the discussion, which the arrangements for the afternoon did not permit. The same ideas as the author had described were germinating in this country, and a number of the members, he thought, would like to get into correspondence with Dr. Colin, who was at the hub of this movement which seems to have advanced further in France than here.

GARDEN PARTY.

Dr. and Mrs. Worth held a reception of members and their friends on the lawn of the hospital, where a band discoursed an excellent selection of music. Unfortunately a sudden change in the weather necessitated retirement to the marquee, where tea was partaken of by those who remained and much enjoyed.

MORNING SESSION.—FRIDAY, JULY 15TH.

The President in the Chair.

PAPER.

"The Problem of the Feeble-Minded in South Africa." By Dr. J. T. DUNSTON (Commissioner in Mental Disorders, Union of South Africa). (See p. 449.)

The PRESIDENT remarked that the Association had had, as he knew it would,

a most interesting paper from Dr. Dunstan. Not only so, but it was most important for our own country, in regard to the measures it was decided to institute here. Dr. Dunstan and he were not only old friends, but also old colleagues, but he did not know that either of them could boast of being very good correspondents. They had not met for about twelve years, but when they did recently meet, their long talk showed him, the speaker, that though they had not met for so long their minds had been working on precisely the same lines in regard to the specialty. The synthesis of suggestion which had been germinating for years was identical. As he said in his presidential address, the Union of South Africa had undoubtedly given this country a lead. There were many points he would have liked to allude to, but would content himself with naming the matters he hoped would be discussed. The first was, the ability to proceed further by ordinary regulation. That had its advantages and its disadvantages, and at the moment that process was not in fashion in this country. He had listened attentively to all the author's remarks on ethnology, because they were of the profoundest interest, and it was the greatest pity that money was not privately found to promote research into questions concerning the mental characteristics (normal and morbid) of certain races; they might soon be extinct, and we might thereby lose lessons of extraordinary interest. The author's mention of the Alexandrian Hospital showed that here again workers in the two countries were working on much the same level, because in this country we were opening two big institutions—one in North Lancashire, the other in London—for mental defectives.

Dr. G. E. SHUTTLEWORTH said it had been a great gratification to him to hear this admirable paper by Dr. Dunstan on the progress which had been made in South Africa during the last few years in regard to the care and treatment of the mentally disordered. When he was in active consulting work, he was frequently approached, by letter and personally, by parents from South Africa, who desired to know what to do with their defective children. He believed there was at that time a special institution for such cases in Grahamstown, but that was the only place of the kind that he personally knew of in the Union, and that seemed to be very inadequate. He was pleased to hear that the matter was being taken up in all parts of the Union, and he hoped that, by-and-bye, there would be adequate provision for both public and private cases, the latter being children whose parents could afford to pay for their maintenance in a proper training institution. The history of the movement given by Dr. Dunstan was similar, on a compressed scale, to that in England. First, there was the philanthropic movement sixty or seventy years ago, which had as a result the founding of voluntary institutions such as those at Earlswood and Colchester, and the Royal Albert Institution. As time advanced, a number of societies became interested in children, and charitable efforts were made to reclaim them when mental abnormality was recognised. This eventuated in the establishment of homes of another character, most of them small voluntary homes, and, what was more, in the formation of special schools on a large scale; in these some fifteen thousand children were under education at the present time. That brought to light the element of mental defect, of greater or less intensity, in a very large section of the population. Then, of course, the question arose as to what was to be done. After a good deal of discussion, and—at first—disappointment, the Mental Deficiency Act of 1913 was passed and became law, though it could scarcely be said to have come fully into force even now, owing largely to the war and the consequent financial depression. Hence the accommodation for those needing life-long care was, at present, quite inadequate. That state of things was, however, gradually, by temporary measures, such as the use of disused workhouses, being to some extent met, but he thought it would yet be some years before there was full enjoyment of all the resources which were foreshadowed in the Act to which he had referred. He asked if Dr. Dunstan could tell him of any institutions in South Africa other than the Alexandra Hospital which were specially adapted for mental deficiency cases, as distinct from cases of actual insanity; also whether there were, in the Union of South Africa, any private institutions.

Dr. J. G. SOUTAR said this meeting of the Association would be memorable for many things, and for nothing more markedly than for the extraordinarily interesting circumstance that in the old countries of Europe and in new countries, too, it was found that the minds of men were working strongly in one particular groove to effect the solution of a very difficult problem. Members had heard from those who had spoken from Spain and from Canada at the different meetings, also from

South Africa, that exactly the same problems were in the minds of men who were dealing with the particular work in which the Association was interested. England, France and Spain, as old countries, were learning a good deal from the new countries which were solving their problem in their way, and the new countries could learn from the old countries the failure to recognise that the movement ought to have been more steadily progressive in the liberation of treatment from purely legal restrictions. What struck him as being of enormous advantage in the system which had been pursued in South Africa, was that they in that country were recognising that mental disorder was a unity from start to finish, and that the differentiation, which had been so markedly established in this country, in separating mental disorder according to the age of the individual, perhaps, or according to the particular manifestation of it, was altogether artificial. An intensely interesting part of Dr. Dunston's paper was that in which he referred to the mentality of natives in South Africa. He showed how very important it was, in dealing with various constituent races of our great Empire; that psychological consideration should not be left out of account in dealing with those races. It was not accurate to speak of them as an "inferior race," but as a race possessed of peculiar qualities which required special environmental conditions for the best and fullest development of these qualities. But to expect them to come up to the standard of other races which possessed a totally different mental make-up, was to place upon those so-called inferior races a restrictiveness, and to make a call upon them which was absolutely certain to bring about disaster and failure. The inquiry which Dr. Dunston had indicated showed that psychiatry was not only concerned with cases of mental disorder, but that the knowledge derived from this study was a highly important factor in the government of people. Less in the curative and more in the preventive sphere, as the principles of mental hygiene prevail, will psychological medicine prove the wide range of its utility.

Dr. F. H. EDWARDS wished to assure Dr. Dunston how deeply he, with others, had appreciated his all too brief remarks on the aborigines in South Africa. The author did not differentiate between those races. We knew little of them in this country, but some who were students of anthropology realised that there must be marked differences in psychology between the Basuto, the Kaffir, and the bushman belonging to the different periods. It was singularly unfortunate that we had no collected work, so far, on the mentality of the earlier races, especially from the morbid psychological standpoint. Practically all his reading had been confined to the observations of missionaries or other travellers, and, to a large extent, owing to the lack of special knowledge, they mislead. Last year, at a Congress of the Church of England held in London, a certain bishop assured him he had been asked to try and destroy a were-wolf which was haunting the village, and that he had gone out with his gun—the incident happened in the author's area—and, in the darkness, had seen the leopard coming across the open clearing. He fired and brought down a leopard, but it got up again and the bishop followed it into the jungle. In doing so he arrived at a little hut in the clearing, and found a Hottentot in the last stages of dissolution, and extracted from the man's jaw the bullet which he had fired at the panther or leopard. That was the kind of story which was told over here, by missionaries and others, and it would be a matter of great interest to students over here if further information could be obtained about some of these earlier races before they had become altogether extinct. It was of extreme interest to realise that one could not give the civilisation of the white races to certain of these earlier races. It was known that in Australia a race had practically become extinct as a result of an endeavour to civilise it, and he took it that in the South African Commonwealth there was that extraordinary distinction between races. Some were in a condition to go into mines and work, others could be employed in agriculture, while some were unemployable.

Dr. C. CALDECOTT much appreciated the President's invitation to him to speak, but he was not present to hear Dr. Dunston's paper. With regard to the remarks about the nigger mentality, all he could say now was that about forty or fifty years ago, at the time of the Ashantee war, Col. Lanyon brought home from South Africa the son of the King of Ashanti. His name was Kofi Nti; he was brought to their school, and remained there seven years. With regard to his educational capacity, he was at first found to be highly intelligent, *i.e.*, in the first year he rapidly went through the ordinary teaching, which even included elementary mathematics, but after the second year he learned nothing at all, and could not be moved

further up in school. He was Prince of Ashanti at the time, and presumably one of their most educable. As a matter of historical interest it happened that he, the speaker, as medical officer of an institution for mentally deficient, had the privilege of working under the Lunacy Acts, at the Colchester Institution, in January, 1886, the year in which the Idiots' Act was brought into force, but its enforcement was postponed until March owing to difficulties in the Government. In 1914 the new Mental Deficiency Act came into force; therefore he had worked under all three measures. The institutions he had worked in were charitable ones. There was some difficulty in the old institutions getting their working schemes in accordance with what the authorities desired, but he felt that there was nothing which need cause trouble if there were a little amicable discussion. But as they had still to work as a charity during the last few years, it would be understood that their difficulties were great. He understood Dr. Dunston to say that the Binet tests did not apply for the natives; did he mean thereby that the Stanford revision also did not apply? It was known that the Binet tests had to be altered, because they did not apply in many ways, even to ordinary mental deficiency. Personally, he thought the revised tests might be satisfactorily used.

Dr. W. M. ENGLISH said he had been very much interested indeed in Dr. Dunston's report of the active steps being taken in Africa on the subject of mental hygiene. And results were being obtained there. It would no doubt take a long time to educate and to isolate those who required it. How far this rapidly-developing population could be educated was a great question. In America, especially in Massachusetts, they were making wonderful advances in the congregation and isolation of mental defectives; and a little was being carried on in this way in Canada too, though in the latter country they were really only just waking up on the question. Men from this country had been kind enough to come over, and he understood that they were shortly to come again, at the invitation of the several provincial Governments, to give aid in this most essential work.

Dr. DUNSTON (in reply) thanked his hearers very much for their kind reception of his attempt to put the position of affairs in South Africa before them. In answer to Dr. Shuttleworth's question, they had an institution in Grahamstown, which was built for defectives to be educated in. It became necessary for the lowest grade idiot the country produced. There were no private institutions there at all. One or two nursing homes had been licensed, but they were only for the temporary treatment of patients who were suffering from some acute form of mental disorder which appeared likely to be recovered from in a few days. There were many tribes in South Africa. Only the Hottentots and Bushmen appeared to be dying out; all the others seemed to be thriving, and were increasing their populations faster perhaps than the white population. In this the Bantu people were included. Most of the other tribes did not vary much in the matter of mental capacity. The Zulus were much more warlike than the Basutos or the Kaffirs. In fact there might have been no Kaffirs at all in the country if the Zulus had had their way. In their native state they all seemed to be lazy and improvident, and it required a good deal of stimulus to keep them steadily at any kind of work. The expression "working like a nigger" as usually applied was quite out of place, for the nigger did not believe in doing anything unless someone was looking on to see that he did it. There was a very important economic factor which might make a great difference, *i.e.*, that huge tracts of territory in South Africa had been set aside purely for the use of natives, in which they lived their kraal life, and were out of touch with civilisation generally. It might be that these reserves had a great influence in preserving the races. Every employee at the mines and elsewhere wanted to go back to his kraal or village for six months in each period of about three years. This also had a bearing on the question of mental calibre. If, as time went on, laws were modified and the reserves were not kept as strictly as now, the tribes might begin to die out. He had been very interested to hear Dr. Caldecott's remarks about the Ashanti Prince. One of the first things he read of in South Africa was an article by a very intelligent missionary lady, who ran a very well-established school. She found that up to the age of puberty the children got on rapidly, but at the age of puberty progress stopped and they became duller mentally. That seemed to be the experience of many people. He agreed with Dr. Soutar that psychological medicine would never come into its own until it was recognised that it had something to do with every branch of human activity.

RULES UNDER THE REGISTRATION OF NURSES ACT.

Dr. BEDFORD PIERCE said it would probably interest members to know that an important step was taken on the previous day with respect to the registration of nurses, in that the Minister of Health signed the rules which had been framed by the General Nursing Council. Therefore those rules were now statutory. They regulated the conditions under which nurses were to be registered. They did not deal with nurses in the future, but with those styled in the rules "existing nurses" and "intermediate nurses." "Existing nurses" were those who completed three years' training prior to November, 1919; "intermediate nurses" were those now in training who would complete their three years' training before July, 1924. A particular part of interest to the Association was, that there was a separate section for mental nurses, and this was divided into two parts: (1) Those who were mainly nurses dealing with the insane primarily; (2) those engaged in the nursing of mental defectives. In both those subdivisions the certificate of the Medico-Psychological Association had been formally accepted as providing evidence of sufficient training. That was very satisfactory, so far as it went. The future, however, was not quite so clear. It must be borne in mind that there had now been created a new profession, that of nursing, with a definite statutory position in the country, and the law intended that in the future these nurses should manage their own affairs, very much in the same way that the medical profession managed its own affairs. The body which was to do this was the General Nursing Council. That, in the future, would be very largely constituted by elected members, *i.e.*, persons elected by the registered nurses. Therefore, if the section of nurses which this Association was primarily interested in, the mental nurses, was to have a voice in the future management of the nursing profession, they must become registered nurses so as to have the right to nominate members to sit on the General Nursing Council. At the present time that Nursing Council was singularly void of any representative of mental nursing; he himself was on it, but he was not a mental nurse. The only representative of mental nursing was a male nurse; there was no woman representative of this particular branch. He, therefore, hoped the new council which would be elected in 1922-3 would be differently constituted.

He felt sure members would be glad to hear the news he had just imparted, and that the certificate, which had been worked at for so many years and of which they were so proud, had been formally recognised. (Applause.)

The PRESIDENT said he desired to take this opportunity of expressing the Association's great satisfaction that they had been able to have with them at this annual meeting two of their corresponding members, one a representative of France, their old friend, Dr. Henri Colin, and the other from Spain, Dr. Coroleu. And he repeated what he said at the beginning of the meeting—the pleasure felt at having present Dr. English, the representative from America. It was a great encouragement to have delegates join them in this way. The Association had received letters of regret at not being able to attend from practically each Dominion of the Empire, and of all these friendly messages due record would be made.

A further matter was, that certain resolutions ought to be passed, resolutions so clearly required that if this were not done the President could be rightly blamed for an important omission. On the previous day many of the members enjoyed the kind hospitality of the Committee of Springfield Mental Hospital, and he was quite sure the meeting would wish that to be fittingly recognised in a letter. And perhaps he would be authorised to forward a similar letter in regard to this afternoon's programme of visits.

This was agreed to.

Lastly, the Dinner which was held was, he hoped, very enjoyable, but he did not think it was generally known to whom the arrangements, so well carried out, were due. The arrangements were left in the hands of a committee, consisting of Dr. Chambers, Dr. Edwards, Dr. D. W. Smith and Dr. Worth. He knew well the tremendous labour it had been to those gentlemen, and to some wizardry on the part of Dr. Edwards was due the serviceable arrangement of the printed dinner list, although the printers had at first said it was impossible to get the work done earlier than ten days after the date fixed for the dinner. And he specially wished

thanks to be given to Dr. Worth for his Herculean labours, which he, the President, watched with sympathy and admiration.

Expressions of thanks were unanimously passed.

The PRESIDENT also proposed that the President and Council of the Royal Society of Medicine be thanked for the use of the admirable rooms for the meeting, which had made all the difference to the success of the gathering.

This was also heartily agreed to.

PAPER.

"Psychology and Psycho-therapy." By WILLIAM BROWN, D.Sc., M.D.

The PRESIDENT said he was sure those present had most thoroughly enjoyed listening to Dr. William Brown's contribution, which had been eminently constructive, not destructive. It was what one would expect from the Reader in Psychology at Oxford. While members would deplore the fact that Dr. McDougall had relinquished that post, they were glad to know that his successor was Dr. William Brown. He did not propose to attempt to discuss the paper, but, beneath it all, one felt that a man who could do the class of work outlined in the paper must be steeped in the humanities. It was not because of a man's abilities in the matter of Greek or Latin, as they were mere tools to enable him to become interpenetrated with the humanities, and that was also necessary for the philosophic attitude which Dr. Brown realised as a necessity. He hoped that the short time available for discussion on the subject would be valuably used.

Dr. J. CARSWELL said he did not think anyone could fail to appreciate the lucid exposition of the subject which Dr. Brown had given, and if remarks of a critical character were offered, he asked Dr. Brown not to regard them as hostile in intention. The new orientation presented was bewildering, and he thanked Dr. Brown for having, to some extent, relieved him of his lack of orientation in regard to it. He was very pleased to hear Dr. Brown end with the much more understandable statement of the position he took up, as to the necessity of combining psychological studies with philosophical habits of mind. He was glad Dr. Brown departed from what appeared to be, in the earlier part of his address, an assertion of the need—which would be appalling to those at the speaker's time of life—of reading and studying the great philosophies before there could be much hope of understanding psycho-therapy. He was pleased to discover, towards the end of the speech, that all he meant was that philosophy was not contained in the learned books but in the minds of men, in the emotions of human beings; and that all he could ask one to do—what he, the speaker, claimed and hoped even psychoanalysts would always do—was to bring to bear the ordinary standards of what appealed to sane and reasonable men. There was no need for him to invoke the name of James and his pragmatism in support of that position. No man could have the scientific standpoint in life who was not characterised among his fellows as a man of common sense. He feared some of their psycho-analyst friends had been impatient about that. Someone had said that common sense was common ignorance. He was glad to notice in Dr. Brown's address an absence of that kind of thing; it would encourage a further study of the position. He was glad also that Dr. Brown emphasised or justified the attribute of the "religious outlook" on life which the physician might impart to his patient, or which the patient might discern in his physician, even if it were only subconscious. He therefore did not need to offer any apology for quoting one of the greatest preachers and ecclesiastical leaders Great Britain had ever known, a great philosopher as well as a great theologian—Dr. Thomas Chalmers. He once preached a sermon which, until recently, used to be read by young men in Scotland as a model of exposition. It was known as the great sermon on the expulsive power of a new affection—a title given to it by Chalmers himself. If Dr. Brown could find time to read that, the speaker thought he would find justification for much he had said to-day. The same method had been known and organised with very successful results in religious and ecclesiastical spheres by the Jesuits. Every melancholy patient resented being told to buck up and knock that nonsense out of his head and get back to work. But if the well-groomed physician spoke to him in sympathetic tones the patient would feel drawn to him by the show of sympathy, and the physician would have some power over him. One of the outstanding blots on medical treatment was the failure to treat scientifically the inebriate. He would take, for an example, the adolescent inebriate. At nineteen or twenty years of age the youth began to drink alcohol

to excess, and by his thirty-fifth year he was a confirmed inebriate. It was regarded as an inherited or acquired fault in a person with a psychopathic constitution; and there was much to justify that view. But psychiatrists had never been able to treat these cases successfully. Had psycho-analytic methods yielded results in that class of case? It was believed to be of combined psychic and physical origin; could the psycho-analysts disentangle the physical entirely, and make the case a purely mental one? If the psycho-analysts could point the way to removing this stigma on their special branch of the profession, many would be most grateful to them.

Dr. BEDFORD PIERCE said all present had been fascinated by this paper, and perhaps few felt competent to criticise it. He did not himself venture to say anything in the nature of criticism. He asked whether Dr. Brown had been in any degree successful by any psycho-therapeutic method in directly assisting a melancholic patient. They should be capable of help, seeing they had intelligence and desired to be helped.

Dr. SOUTAR said he knew Dr. Bedford Pierce had helped many a melancholic patient by psycho-therapeutic methods, as he had been applying the method for many years; it was simply that he had learned these methods so completely that they had dropped down into his subconscious mind, and so he was applying the practice without knowing it. The subject was too large to discuss at the end of a heavy meeting. With regard to the psychologist being a philosopher, one might call him a philosopher, but after all, one required to be a man of the world and to understand human nature, and the effect of environmental conditions upon different types of nature. It was summed up in having a good knowledge of the world and of human beings, and the capacity of putting oneself in the position of the type of person who had come for assistance. One must be able to realise how the difficulties they had experienced and continued to experience appealed to them, and not to oneself only. In reference to Dr. Carswell's remarks as to religion, the physician must realise that religion was a real thing to many patients, and he must be sympathetic towards it, and help them to adjustment on the lines of their particular mode of reaction. At the present time a very large number of people, particularly women, were finding difficulties with regard to their religious life. They were recognising that the well-established conventional restrictions did not appeal to them as truth, and yet they could hardly throw them off. And the conflict existed between the two until they recognised and realised that they had a right to be true to themselves, which, after all, was the best type of religion. That was where conflicts came in. A particularly pleasing thing, he thought, in Dr. Brown's paper was, that he recognised that many psychiatrists hesitated to use the word "psycho-analyst," not because they did not believe in analysis—they had believed in it long enough—but because there had been attached to the term a preconceived theory which they did not accept. To start out on a process of investigation with a preconceived theory and determine that one was going to bring every little incident in to square with that theory was unscientific. But to investigate the mental history of a patient was just as necessary as was an investigation of physical histories in the individuals who came before the physician. When a patient came to a surgeon with a pain in his right iliac fossa, the surgeon did not fail to ask whether the patient had attacks of colic in his early days. The same applied to the history of a patient's mental make-up which one obtained by psycho-analysis. Members were very much indebted to Dr. Brown for this moderate and very understandable exposition of what he, the speaker, regarded as an organising of methods of investigation into mental cases and methods of treatment which had been long recognised as the appropriate ones. The great advantage nowadays was that people were more alive to the necessity of coming for advice in the early stages of mental disorder, at a stage when they could understand their difficulties, and when they could be readjusted on the basis of understanding and knowledge.

Dr. WILLIAM BROWN, replying on the discussion, said Dr. Carswell, in discussing the contribution, had been all too kind in his remarks about it; there were some things he (Dr. Brown) ought to have brought in, others ought to have been considered at greater length. But he hoped he had not given the wrong general perspective when he emphasised the contention about philosophy. By philosophy he meant a little more than common sense, though he realised that that in itself was

an outlook on life. He was thinking, rather, of something which would not necessarily take the place of, but at any rate would supplement, religious beliefs, that, under the influence of criticism and under the influence of education, were becoming much less clear cut and pictorial to one's patients, as to other people. He felt that in many patients this difficulty was a great one: they knew what their repressions were and how they could solve them. They might get relief, but they were vaguely aware that they might get another conflict, and they experienced a conflict higher up on the moral plane. The alternative was to say: "Don't worry about that; let us get on with the analysis"; and one went on month by month laying the mind bare. One said: "I have no philosophy; all I know is that the moral distinctions of the present day are not entirely satisfactory; you must find the truth yourself." That was rather hard on patients. In some cases it worked, in others it did not. One heard stories of that kind from the clergy at the present day. Clergy were now getting experience of persons who had been psycho-analysed and had had their general religious outlook disorganised thereby. He agreed that modern terms were appalling; even Freud admitted that. And Freud had made great changes in his general theory recently. In his last pamphlet—*Jenseit's des Lustprinzips*—he modified his theory of dreams, though up till then he said the one thing which stood firm was his wish-fulfilment theory of dreams. There was another principle at work, the repetition principle—*Wiederholungszwang*—the tendency for experiences to repeat themselves. Freud now admits that this impulse cannot be subsumed under the pleasure-principle, but must be added *ab extra*. But, curiously enough, Freud does not like anyone else to suggest changes of theory; if left to himself, however, he quietly introduces modifications from time to time and his followers docilely follow him in these changes. With regard to James's pragmatism, he had heard a Frenchman describe that as "not a philosophy, but a way of doing without philosophy." No metaphysician claimed to produce a complete philosophy or system; he simply said one must have as an ideal one all-inclusive system. With regard to results being poor in the case of inebriates, he was aware of that. With suggestion-treatment one could get temporary benefit, and as long as one kept in touch with the patient, when he got another outburst he could have further treatment. Analysis enabled one to see some of the mechanisms at work—disappointment, jealousy, etc., sometimes homosexuality. One felt there was not only obvious heredity, but symptoms pointed to physical and physiological as well as psychological factors. In speaking of psycho-therapy he hoped it would not be thought he depreciated physio-therapy, which must be used: psycho-therapy was, it seemed, only a small portion in every case. In one's interactions of mind and brain there was a vicious circle; as soon as the mind went wrong the brain went wrong, too, and though one got a "purchase" on the brain through the mind and on the rest of the body—the other side had also to be considered in so many cases. The intractable nature of the illness, whatever psycho-therapeutic methods were employed, constituted a most important physical factor. One could watch patients in different phases and get a quasi-physical explanation. For example, in manic-depressive insanity the cycle from the depressive to the manic stage and conversely was more like a physiological process than a psychological one. Dr. Bedford Pierce referred to melancholia; he (the speaker) could well believe that Dr. Pierce could get good results in melancholia, because these patients responded to a readiness to understand them, but they were very difficult cases, even if one could spend a long time with them. But those who were working in institutions must be especially impressed by such cases. Suggestion-treatment helped, especially if they were put on the look-out for the law of reversed effort. All these patients had a fear that the opposite would take place. They said one's words were comforting, but a little voice told them that the opposite would occur. It was not repression, but a subconscious fear. All these patients had that fear. Dr. Soutar said the psycho-therapist should be a man of the world. That was what Plato said: he meant by philosopher the man of wide outlook and deep insight into humanity, and the humanities were humanities at the time Plato wrote. It was only since then that philosophy, at certain epochs, got a bad name through its dry-as-dust exclusiveness and the tendency of its votaries to live the life of the recluse. It really involved the mental putting of oneself in the place of the patient. If there was one thing more essential than another in equipment it was this readiness to put oneself in the position of the patient—to see the world through the patient's eyes. That was the process which

was always going on; it was that which made the strain of this work so real. It was not merely recording what the patient was saying, but trying to attune one's mental processes to his. With regard to religion, he did not agree with Dr. Soutar that it did not matter whether the physician had religion or not. Patients themselves were very sensitive in this matter, and they quickly summed up what degree or intensity of religion the physician had. During the two years since the war, in treating civilian patients he had had to reconsider his own religious beliefs more and more, because he had found that what he had to say must be said with conviction. If he did not believe it it did not help the patient, but disturbed him still more; patients were on the edge of believing or not believing, and a sign of deficiency or uncertainty in oneself merely made the patient worse. It was not one's irreligion which disturbed them, but the uncertainty in attitude in these matters.

This concluded the meeting.

THE DINNER.

The Dinner was held at Connaught Rooms, Great Queen Street, and was presided over by the President, Dr. C. Hubert Bond, C.B.E., and supported by a large gathering of members, both honorary and foreign, associates and ordinary. The guests included members of both Houses of Parliament, the Church, several Ministers of State, the Navy, Army, and Pension Medical Services, the Lord Chancellor's Visitors, the Lunacy Commissions of England, Ireland and Scotland and South Africa, the University of London, London County Council Asylums Service, Metropolitan Asylums Service, medical societies, and many distinguished surgeons, physicians and famous men of science and literature. Space will not permit the publication of a complete list of those present, and a few representative names must suffice: The Lord High Chancellor (Lord Birkenhead), Sir Alfred Mond, Bart., M.P. (Minister of Health), Lord Southborough, Lord Dawson of Penn, the Lord Bishop of Worcester, Lord Justice Atkin, Surg. Vice-Admiral Sir R. Hill, K.C.M.G., Lt.-Gen. Sir John Goodwin, K.C.B., Sir Lisle Webb, K.B.E., Sir Claud Schuster, K.C.B., K.C., Sir Arthur Robinson, K.C.B., Sir George Newman, K.C.B., Sir James Crichton-Browne, the Hon. John Mansfield, Sir Robert Armstrong-Jones, Sir William P. Byrne, K.C.V.O., Mrs. Hume Pinsent, Sir Marriott Cooke, K.B.E., Dr. Sidney Coupland, Mr. A. H. Trevor, Mr. S. J. Fraser MacLeod, K.C., Lt.-Col. B. T. Hodgson, C.M.G., Dr. R. W. Branthwaite, C.B., Dr. Hamilton Marr, Dr. W. R. Dawson, O.B.E., Dr. J. T. Dunston, Sir Reginald Blankenberg, Sir Sidney Russell Wells, Mr. H. F. Keene, O.B.E., Mr. W. C. Clifford Smith, O.B.E., Sir Duncan Mann, Sir Berkeley Moynihan, K.C.M.G., Sir Dawson Williams, Sir William Job Collins, K.C.V.O., Sir Walter Fletcher, K.B.E., Dr. Henry Head, Sir John Bland-Sutton, Sir William Hale-White, K.B.E., Sir Frederick Mott, K.B.E., Mrs. How-Martin, Dr. Henry Colin, Dr. W. M. English, Dr. W. Coroleu. In all some 150 members and visitors were present, the President acting as immediate host to the dais, while the Treasurer, General Secretary, Editors and other officers of the Association represented him at the several tables.

"THE KING."

The PRESIDENT submitted this toast, and it was pledged with loyal enthusiasm.

"THE LEGISLATURE."

The PRESIDENT, in submitting this next toast, said: My Lord Chancellor, Sir Alfred Mond, My Lords, Ladies and Gentlemen,—That this toast is not usually on our programme marks no lacks of respect for that august assembly, but rather an exercise of self-restraint, enabling us the better, when fair occasion calls, to take her by the hand and proclaim our reverence. Verily we have good reason to revere, for of all departments of organised knowledge, and especially of medicine, none is more dependent on the goodwill of the Legislature for its practice than psychological medicine. And for progress in our specialty, most truly—if I may say so without disrespect—that body "yet holds the eel of science by the tail." Wherefore our reverence is coupled with entreaty to grant us that measure of relief which we believe will set free our medical activities without in the least endangering the personal freedom of citizens. Fellow

members of this Association, we are singularly fortunate and singularly honoured this evening, and assuredly this date will, for all time, be marked with a double star in our calendar. Not only are both Houses of Parliament represented here to-night, but we have in our midst two members of the Cabinet, and I think it is accurate to say that during the eighty years' existence of this Association, the present is the first occasion on which either of the two Parliamentary Chiefs under whom, either directly or through the Board of Control, our professional work is done, has been present at our annual festival. But to-night both have honoured us with their presence. In Lord Birkenhead, the Lord High Chancellor, we see the distinguished representative of that ancient office, with all its dignity, glamour and traditions, which have come down to us from the days of the Confessor. This is not the time or the place to pass in review, interesting though they are, the many important duties which now devolve upon the Lord Chancellor, but we do well to bear in mind that ever since its existence he has advised the King "in matters of conscience," and has acted judicially in the exercise of certain prerogatives of the Crown, among which are matters relating to the persons and estates of idiots and the insane, and that to this day he is entrusted, by sign-manual warrant, with the care and custody of the insane. Testimony is not needed, but I can assure you—and many of you have personal knowledge of the fact—that those duties are exercised in his department with constant and anxious solicitude, and my colleagues on the Board of Control and many others here present will endorse my remark that this right of appeal to the Lord Chancellor is deeply cherished by hundreds, aye thousands, of persons whose mental illness is of a nature and duration that entails restriction of their liberty. We are very grateful, my Lord, for your presence here to-night. (Applause.) In the presence of the Right Hon. Sir Alfred Mond, His Majesty's Minister of Health—for which we are equally grateful—we take note, with the utmost satisfaction, of what we hope we may regard as an official recognition, from the highest source, of the kinship between mental and bodily disorders. It was on May 17th, 1920, that, by Order in Council, the Board of Control became affiliated to the Ministry of Health, and when most of the powers of the Secretary of State, under the Lunacy and Mental Deficiency Acts, were transferred to the Minister of Health. This shifting of long-established and friendly moorings was not made without regret, but there was common consent that from this significant affiliation, which leaves the Lord Chancellor's duties unaffected, it would be legitimate to expect that, finding herself in the main stream of medical thought, psychological medicine, when the Legislature has granted the measure of relief for which we clamour, will in no way lag behind other branches of medicine. This is the first occasion since the Ministry of Health was created that we have held an annual meeting in London, and we see in the Minister's consent to be present at it the happiest of auguries. (Applause.) And may I say that we claim with pride that the former Minister of Health, the Right Hon. Dr. Addison—from whom a letter has just reached me expressing regret at inability to be with us and his cordial wishes of success to the meeting—is a member of our profession, and we shall never forget what he did for us in procuring the Order in Council to which I have referred. We are also able to include in this toast the Lord Bishop of Worcester, whose kindness in being with us we all appreciate, and especially must the many who, like my colleague Sir Marriott Cooke and myself, were brought into contact with his great work at the War Office, which so often extended to visits to the twenty-three mental hospitals which were being used as war hospitals. We are glad to welcome, too, Lord Southborough, who is presiding over the Departmental Committee of the House of Lords inquiring into so-called "shell-shock"; Lord Dawson of Penn, whose presence we interpret as showing sympathy with our aspiration that the needs of psychological medicine will not be overlooked in the maturing of his Council's comprehensive scheme of medical services. I ask you to drink the toast with enthusiasm. (Applause.)

The LORD HIGH CHANCELLOR (LORD BIRKENHEAD), in responding to the toast, "The Legislature," said: Mr. Chairman, Ladies and Gentlemen,—I shall certainly try to imitate the most admirable example of brevity which your Chairman has set to us in his speech; long speeches are at any time intolerable. They are more intolerable, perhaps, after dinner than at any other time, and they are most intolerable at the closing stages of the inclement weather which we have been enjoying in the course of the last few weeks or months. I count it a great

privilege that I should have been invited to be present to-night as a guest of this Society. You have reminded me—though the topic, I assure you, is seldom allowed to be long absent from my mind—you have reminded me that I discharge a historic and not entirely nominal function in relation to those who have the misfortune to be mentally afflicted. Each morning my post-bag supplies me with evidences at once of my responsibilities and the somewhat gradual processes of your curative treatment. (Laughter.) However, I may claim, and I do claim seriously, to examine all these communications myself which are addressed to myself, and it is, or it ought to be, a source of satisfaction to everyone to know that it is the literal truth that no character of complaint is ever addressed to my department which is not most carefully examined by some experienced and competent person. (Hear, Hear.) And these letters are, some of them, extraordinarily sad. To you, gentlemen, the contents of letters of this kind are very familiar; to me, I confess, when I first undertook the duties of this office, they were less familiar. But I have long since reached the conclusion that it is better that a thousand trivial and baseless cases should be carefully examined than that there should be even a risk that one in which there is even a vestige of substance should be overlooked. (Applause.) It is a pleasant and a novel experience to me, as I suspect it must be to my Right Honourable friend the Minister of Health, to attend on any occasion, social or political, in which the health of the Legislature has been given with so much apparent cordiality. I say “apparent cordiality,” because I know those I address are naturally skilled in dissimulation—(Laughter)—of their true feelings; they are masters in what I believe is known as the soothing manner—I will not say the death-bed manner because that would perhaps suggest to my colleague and myself, as far as our political standard of life is concerned, a conclusion too premature. But it is literal truth that I have not heard so much that is agreeable, and so little which was disagreeable, as was contained in the speech we just heard from the Chairman which was devoted to this topic. Indeed, Sir, you actually said it was a topic which you approached with reverence. It must have been long since either the House of Commons or the House of Lords in a public speech or in the columns of our daily and helpful press—(Laughter)—have been treated to a spirit at once so admirable and so novel. (Laughter.) Speaking for myself, I rather like it. It comes with all the charm of a delightful freshness. Now I think we may congratulate ourselves on a variety of grounds for this attitude of mind. It may be, of course, that it is to be partially explained by the fact which you hurriedly added, Sir, that this Association, as I understood it, has not been to London for many years—(Laughter),—and therefore you may have wished to conduct on the spot some of those semi-scientific inquiries which, I understand, are the natural diversions of scientific men. Well, however this may be, the toast of the moment is not one which I have heard recently drunk. Sometimes the House of Lords is drunk—(Much laughter),—sometimes the House of Commons, sometimes the health of both is considered generically. I have not, for a long time, heard them associated in their legislative capacity. And it is, I confess, a subject of much interest to me that after three years, in which we have regained some moderate degree of activity after the paralysis of the war, that that which we have done or that which we contemplate should excite either so much enthusiasm or, at least, so little displeasure. I suspect that the majority will entirely disagree in so far as your Chairman, who is the real mouthpiece of your views, is not the exponent of your civility. I suspect that the majority of our countrymen at the present moment contemplate our activities with disapproval, and our future progress with anxiety. (Laughter.) I always measure the merits of any Government by the size of those annual, unappetising volumes which record the course of our Statute Law, and I have always been accustomed to console myself, in the days when I was in opposition, with the idea that a practising lawyer could always distinguish whether you had in power a sane Unionist Government or a sane other Government by the size of the volume in which the Statute Law was embodied—that attractive slim volume such as might accompany a gentleman to bed in which he wished to sleep without causing him the slightest inconvenience, recording the annual outcome of our legislative labours. But when we were succeeded by others, for the good purposes of Him who arranges everything, as sometimes happened, I always noticed that the size of these volumes was enormously altered; it was doubled, trebled, it was quadrupled, so that nobody but an athlete could pretend to carry the volumes with him. I

regret to observe now, having been for five or six years a minister, and having been a minister for almost three years since the armistice, that the volumes which recorded our efforts steadily grew. Now, Sir, I am not inclined to support an equal degree of censure or to claim an equal degree of praise, if any be due, to another place, because I observe that the volumes of legislation which have each year been passed would have been very considerably larger had it not been for the pruning processes which have been applied in the Assembly in which I lead an existence not altogether, I hope, unfruitful; in fact many of the proposals which have come from "another place" I will only say have left the House of Lords shorn of many features for which they were praised by some and blamed by others. I have a deep suspicion, Sir, that there is far too much legislation. (Hear, hear.) I say this in the presence of my Right Honourable friend, who, I understand, has half-a-dozen first-class measures either ready to introduce or on the stocks or to be laid on the stocks. And I venture humbly to advise him, as he is strong, to be merciful. We indeed can make the still fairer plea, in extenuation for the Government as a whole, that if it is said that in the last three years there has been a large number of competent, lengthy and generally unintelligible measures, we can plead in extenuation that we have repealed several of them since. (Laughter.) It ought not to be made a subject of permanent reproach to a labouring man that he has wasted time in rolling the stone of Sisyphus too frequently, if he can claim that he has frequently corrected his efforts by rolling it down again. In the belief that this relief is well founded, I accept the eulogies which you have been good enough to pass on our legislative activities, and I hope those activities will continue to be corrected as they have been in the way I have indicated. I understand that my Right Honourable friend, true to the spirit of this doctrine, is contemplating at this moment some very considerable jettisoning. I should imagine that he would not consider this the psychological moment for sketching in detail those parts of our recent efforts which we shall have to mourn as extinct. He can at least console himself by the reflection that his faith in this respect has not been a singular one amongst his colleagues. I also feel it strongly, because I assisted in the House of Lords at both processes, and therefore I can contemplate it in the spirit of one who presides at the birth of a proposal and then is able, perhaps, to make some humble contribution to its ultimate destruction. (Laughter.) The constant discharge of these duties renders one, as legislator, at once sympathetic and versatile and yet having a strong sense of proportion. And therefore I have no hope at all that either my Right Honourable friend or any of my colleagues will cease to deserve the title of legislator in its best sense—or its worst, according to the point of view—and we must only hope, each in his own sphere, that the range of our activities may spare the particular subject to which each one of us is devoted. I hope what I have said will restore the waning belief of scientific men in the Legislature; I hope it will assure you that you have not so much to apprehend from our activities as many of you thought when you entered this room, and we may, I think, usefully reflect on the adage, familiar to us all:

"Of all the ills the human race endure
How small the part that kings or lords can cure."

That is a truth which too many of us are too apt to forget. I sometimes wonder how many of the legislative efforts of the past are still to be found producing any actual consequences. The Scotch are very practical, and they deal with their own Acts of Parliament with a simplicity and common sense which has not yet recommended itself to the more southerly mind, because they have long since held that an Act of Parliament may pass into oblivion by reason of desuetude, and that a Judge may pronounce obsequies upon any Act upon which he conducts his examination and decides that it has not produced any consequences for a considerable time, that time not being precisely defined. That is a very simple and admirable rule: it gives great powers to the Judges, and greatly diminishes the mischiefs, or the contingent possible mischiefs of our archaic legislation. Without proposing to destroy the value of the forcible observations I have addressed to you to-night by introducing a similar Bill into the House of Lords, I have already introduced three Scotch Bills to-day, which I do not suppose will do any good to anybody. I do not intend to add to the mischiefs; I merely thank you for the

very great kindness which you have shown in drinking this toast, and express myself, at the same moment, as being suitably gratified. (Cheers.)

The Right Hon. Sir ALFRED MOND, Bart., M.P. (Minister of Health): Mr. Chairman, My Lords, Ladies and Gentlemen,—I am very pleased indeed that I have been able to come and assist at this very important dinner to-night, for the first time as Minister of Health. Your Chairman, in his remarks, was kind enough to express the gratification which he and his colleagues on the Board of Control felt at their present relationship with my Department. He very rightly said that although he regretted the severance of the old association, the transference of the Board of Control, dealing, as it does, with the most important subject of mental alienation, to the Ministry of Health was a sign and symbol of scientific progress which no longer treated lunacy as some mysterious, obscure, God-inflicted malady, but as coming into the category of medical and scientific research, and into the sphere of medical and scientific treatment. (Hear, hear.) This is a great step forward, and I would like, if you will permit me, to say a few words on this subject. What we now call medico-psychology, which some people confuse with practices of a less scientific and somewhat injurious character, is really a development of very recent origin in its highest and true sense. The recognition of the intimate connection of bodily disease and mental malady is, of course, not new, but is daily being more developed, and that leads to the necessity of the co-ordination and co-operation of this important branch of medical science with that of all the others, in order to arrive at a true perspective and a true line on which it is to work. Medical diseases are as wide-spread as they are diversified, and we have abandoned the idea that a lunatic is a person who ought to be confined in some unpleasant place behind iron bars, as a wild animal, as he used to be, for whom nothing can be done. Once having reached this stage of progress, once having realised the great loss to the community and the diminishing of value to the State, we arrive, by not very distant steps, at a point when we wish to cut off this, as every other disease, at its earliest stages, rather than in its later development. The question, therefore, of directing the effort of medico-psychologists to the prevention of mental diseases rather than to wait for the stage of certification of lunacy is undoubtedly one of the greatest progresses which could be made, and one which, I have no doubt, all of you are concerned with and are considering. I know your Association stands for enlightenment in the modern treatment of this question, and I have no doubt your Chairman, in his remarks, was thinking along these lines when he was referring to your dependence on legislation, which my noble colleague so very much deprecates. Of course I must say a word about his speech, if I may. And I would say this: Although he has been deprecating legislation, and accusing me either of passing, or being about to pass, a large number of bills, he carefully concealed from you the fact that he is the author whose *Valuation of Real Property* has produced a Bill of such magnitude that it has been passed because no one has yet been able to read it; that though it has been productive of infinite good, it is one of the most radical measures ever introduced by a conservative statesman, and one of the longest statutes that has ever been placed on our Statute Book. I have no doubt my noble friend will see that it passes. We all think that our own Bills are the only ones which ought to pass, and that nobody else's can possibly do good. What I wanted to say in this connection is this: In order to obtain legislation there are three requisites. The first is a clear idea of what you want. One of the difficulties a Minister of Health has to contend with is often the great diversity among the medical profession on the subject which he is asked to undertake, both inside and outside the house. To the scientific mind, of course, controversy is the salt of life, and differences of opinion show the real living organism. To the lay and crude mind outside, diversity of opinion among experts is the best excuse for doing nothing at all. (Laughter). It is important for the expert to remember that however much he may differ in the council and the chamber, it is most unwise to expose his differences to the public mind. I advise him to take a leaf out of the book of the Cabinet, which, however much it may differ at Downing Street, is entirely united when voicing its opinion on the front bench. The second necessity is a popular opinion which must be educated before any Minister, or any department, however sympathetic, can take any action. And that can very well be done now by the great medical profession. You have only to see the intense public interest which has been aroused by the *Times* controversy on the medical effect of "cocktails," the experimental method in regard to which was being followed as I

entered this room, to show how the public is hungering for guidance on medical subjects. The third thing is to press on the Government the necessity for something to be done, and that is the most difficult thing of all. There are the barriers which have to be overcome before a Bill can be brought in in the overloaded condition of our Legislature; the arguing which has to be done among those who do not like it, or among the secret mischiefs which even medico-psychological methods may fail entirely to unravel. But those are steps which are requisite if the Legislature is to be asked—and it may have to be, and no doubt will be asked in the fairly near future—to deal with some of the difficult and intricate subjects in which you are all interested. So far as I am concerned, I would like to assure you—and as far as my Department is concerned I am sure I can do so—we will look on all proposals with a very sympathetic eye, and with a desire to see all possible progress made. (Applause.) The subject is a difficult and complicated one, and there is much popular prejudice attached to it. I do not think that since Charles Read wrote his famous novel public opinion has been much educated on this subject, and therefore much ground has to be made up. But I have no doubt an Association like yours, embodying as it does a most progressive spirit in your science, and especially since the war with all its sad experiences which have come home to so many persons, such as shell-shock cases, many of which are on the border-line between what you might call neurasthenia and the more severe form of mental alienation, has done and will do a great deal to educate public opinion. I think, therefore, you will find in that connection a fruitful field. I am glad to know you have met in London, and I am glad to think that your work is going on in such a fruitful manner. I am very pleased to have had this opportunity which has been accorded to me of showing how much I, and the Department which I represent, attach to the very important work which you are doing for the common good in our common country. (Applause.)

"THE ROYAL MEDICAL FORCES."

SIR WILLIAM JOB COLLINS, K.C.V.O., M.D., in submitting this toast, said that while he was listening to the weighty and witty speeches of the Lord Chancellor and the Minister of Health, he could not help remembering that it was his privilege in the House of Commons, some time ago, to listen to the maiden speeches of the noble Viscount and the Right Hon. Baronet. He recalled the light-hearted levity, the inspiration of the partisan platform, the dialectics of the Union and the ingenuousness of youth which inspired those earlier utterances of the Right Hon. Gentlemen who had just addressed this gathering. And he gladly reflected that, notwithstanding the years and the responsibilities and cares of office, those Right Hon. Gentlemen preserved some of that earlier levity which characterised them when they were less weighted by office cares. He could not help thinking that, speaking medico-psychologically, those gentlemen might be found, on the application of a little psycho-analysis, to be suffering from severe self-repression as the result of their official duties. But he asked the company to turn from the dull arena of politics to do honour to two Services which knew no politics, and which served, with equal fidelity, any party which happened to be in power—the Royal Medical Services. (Applause.) This was neither the time nor the occasion on which to bear full and grateful homage to the unparalleled services and ungrudging sacrifice, and to record their undying gratitude to the Naval, Military and Air Forces of the Crown during the recent awful past. After all—

"The wise physician, skilled our wounds to heal,
Is more than armies to the public weal";

and those who had the opportunities, as he had, on the Western Front in the rough days of November, 1914, to see something of the work with which the medical services had to grapple, could realise the enormous toll which was levied, in death, in wounds, in sickness and in disablement, and the self-denying labours spent in trying to mitigate these terrors. It was impossible to speak too highly of the work then done; nor could one help reflecting when recalling the hecatombs of suffering they had been called upon to witness that after all there was a soul of good in things evil, and that out of this suffering we had been able to learn much which would lead to the amelioration of suffering, the control of disease, and the

rehabilitation of the maimed. And it was good also to know that in the particular branch of medicine to which this Medico-Psychological Association bore allegiance much new and fruitful knowledge had been attained from the abundant and strange experience of submitting the whole male population of military age to the process of conscription for service. Many old truths had received new light, and perhaps some knowledge which had been accounted new had been found, on further investigation, only to fall in with previous experience of army life. It was his privilege and duty to connect this toast with Surgeon Vice-Admiral Sir Robert Hill on behalf of the Naval Service, and Lieut.-General Sir John Goodwin on behalf of the Army Medical Service. Those who knew the work of those two gentlemen, especially during the later years of the Great War, would know that they were fit to stand in line with the great reformers in naval and military medicine, with Sir Gilbert Blane and Dr. Parkes and Sir Douglas Galton. These names personified the great services of the Departments whose heads they were, and with all cordiality he asked the company to drink to the health of the "Medical Services," coupled with the names of those two distinguished gentlemen.

The toast was warmly honoured.

Surgeon Vice-Admiral Sir ROBERT HILL, K.C.M.G., in responding, thanked Sir William Collins for the way in which he had proposed the toast, and the assembly for the way it was received. The health of the Naval Medical Service, for the time being, was not of the best. It was suffering from anæmia or malnutrition—a good deal of good old blood was welling out. It could only be hoped that within a year or two, when the flood-gates of the hospitals were open and the men who would belong to the profession should receive training in the specialty which this Society represented, matters would have improved. Mental cases in the Navy are looked after in the Naval Hospital at Yarmouth. The history of this Naval Hospital was a lengthy matter. It was built in 1809. About the date of the end of the Napoleonic wars it was given over to the Army, and the Navy did not get it back again until 1863. It would thus be seen that it had lent something to the Army. He was not accusing Sir John Goodwin of having stolen it, but it was a long lapse. It then became a mental hospital, and had so remained to the present day. Unfortunately expenses were going up, and there was much talk about doing away with it, though he sincerely hoped that would not happen. At the present time such an event would be most unfortunate, especially as there were still war cases of mental disease, and it would be a great pity if these cases were thrown out of their old home for financial reasons. Naval men were taken into the service as boys of 15, officers coming at a little earlier age. For them the Navy was a life-long career, and if they failed in that career through a mental breakdown it was very sad. He would be very sorry for them if the present provision could not be continued. He was very glad to see his friend Sir John Goodwin there to-night. He thanked the company for their kind acceptance of the toast.

Lieut.-General Sir JOHN GOODWIN, K.C.B., in returning thanks, said there were various requirements about an after-dinner speech. First, it must be brief. That he would fulfil without difficulty. Secondly, the speaker should avoid giving hard figures and facts. Lastly, one should just utter a few pleasantries, which did not commit one to very much, and sit down. Yet, despite that, he proposed to give a few facts and figures, which, however, he hoped would not prove uninteresting. Afterwards, without saying anything pleasant, he would sit down. He would say a few words which would show the company, in a small degree, to what extent the Army was indebted to the gentlemen on the Board of Control and to the Medico-Psychological Association during the recent war. The aim nowadays was to forget the war, to put it out of the mind. Unfortunately he could not do that; it was always before him, and he was still dealing with it every day. The first hospital given to the Army by the Board of Control was opened in December, 1914, and before long twenty-four hospitals were working solely and entirely for the Army, totalling over 31,000 beds. That was a very great deal, but more lay behind it than was, he feared, generally and adequately realised. He invited his hearers to think of what his statement meant. Twenty-four hospitals were emptied of their mental patients and handed over to the Army. What became of those patients? They were accommodated by the remaining hospitals of the Board of Control. They were there cared for, even by depleted staffs. Staffs worked double time, quietly and unostentatiously. By this means the patients were looked after, and all the twenty-four institutions were handed over

unreservedly and whole-heartedly to the wounded and the sick soldiers of the Army. During the war more than half a million Army patients were treated in those hospitals, and the death-rate among them was under 1 *per cent.* (Applause.) Possibly the laity might think that only mental or neurological cases were dealt with there, but he assured them that more than 444,000 cases of medical and surgical disability were treated in those hospitals. With regard to the results of treatment of mental affections, he did not want to go into long figures, therefore his mind naturally reverted to the largest of all of them, the Lord Derby War Hospital, in which there were over 3,300 beds. During the war more than 8,500 patients passed through the mental section of that hospital alone, and of that number, more than 74 *per cent.* were discharged cured. (Applause.) That showed what the staffs of those hospitals did. He had tried to give an idea of the enormous debt the Army owed to the Board of Control for what they did during the war. He had failed, as he was bound to fail, in adequately representing what that debt was; it was a debt to all those gentlemen who helped so whole-heartedly and altruistically throughout the war. Turning to the personal point of view, Sir John thanked the Association for having asked him to be present; it had been a great pleasure to him to come. He had met many old friends here. Looking round the room, he did not think there was a single table at which there did not sit one or more gentlemen with whom he had been closely associated during the war. He was very closely associated with the President, of whom he saw a good deal during the war; and the more he saw of Dr. Bond, the more he realised the kind of man with whom he had to deal, and the more he recognised the debt, daily accruing, which he and the Army owed to him. At another table he saw a gentleman who served under him, the speaker, during some of the most critical stages of the war, in 1914 and the early part of 1915. He tried to think—it pleased him to think—that in those days that gentleman held the speaker in some kind of awe; he might even have trembled. That gentleman was now a Member of Parliament, and therefore Sir John held him in awe. He being a Scotsman, Sir John put him in charge of a cavalry regiment near Ypres. The Sergeant-Major said—"Thank God you sent us a gentleman whom the lads can understand." And Sir John replied—"Thank God I have sent you a gentleman who can understand the lads." Again he expressed his thanks for the delightful evening he had spent, and he thanked those present for all time for all they did for the Army, for the wounded and sick soldier throughout the war, from the beginning until well after the end. (Cheers.)

"THE GUESTS."

The PRESIDENT, in proposing this toast, said the Association was honoured with the presence of many distinguished and representative guests. In proposing "The Legislature" he did not exhaust the reasons for drawing attention to the Association's good fortune in this respect. They were heartily glad to have present Lord Justice Atkin, and to see in one who held such high position, that union of medical and legal thought as was implied by the fact that he was President of the Medico-Legal Society. It was also a great pleasure to welcome Sir Claud Schuster, Sir Arthur Robinson, and, not for the first time, Sir George Newman; also Sir Lisle Webb, whose department had now a considerable lien on the accommodation of the mental hospitals by the operation of the scheme of "Service patients." It was a source of much satisfaction, too, to have present all three Lord Chancellor's visitors—Sir James Crichton-Browne, the Hon. John Mansfield, and Sir Robert Armstrong-Jones—together with, save for three unavoidable exceptions, all the Commissioners of the Board of Control (Mrs. Hume Pinsett, Sir Marriott Cooke, Dr. Coupland, Mr. A. H. Trevor, Mr. S. J. Fraser MacLeod, Lieut.-Col. Hodgson, and Dr. Branthwaite), besides a corresponding representative from both Scotland and Ireland (Dr. Hamilton-Marr and Dr. W. R. Dawson), and the Commissioner in Mental Disorders from the Union of South Africa (Dr. J. T. Dunston), with whom it was good to see Sir Reginald Blankenberg, who had taken a great interest in the special training of mental hospital physicians by the High Commissioner of South Africa, who had himself hoped to be present. Sir Frederick Willis sent a special message of regret that he was unable to come, and, as the new Chairman of the Board of Control, make the acquaintance

of members of the Association. But all would be pleased to see his predecessor, the Right Hon. Sir William Byrne, who had taken much friendly interest in this gathering, and to whom the company would wish long life and happiness in his retirement. In the Vice-Chancellor of London University (Sir Sydney Russell Wells) the gathering would recognise one who was rendering much help in securing better instruction and training in psychological medicine; and similar helpful interest was being taken by the Treasurer of the Radcliffe Infirmary (the Rev. G. B. Cronshaw) and Dr. Gibson (of Oxford), both of whom were present. In Sir Walter Fletcher and Dr. Henry Head were represented sympathy with the efforts being made at several centres to reinforce and reinstate research in mental disorders, which necessarily languished during the war. It would be a great disappointment to all that neither the President of the Royal College of Physicians nor Sir Clifford Allbutt were able to be present, but they welcomed the Presidents of the Royal Society of Medicine, the Medical Society, the British Psychological Society, the Eugenics Education Society, and of the Society of Medical Officers of Health, together with Sir Dawson Williams and Sir John MacAlister. In emphasis of their sincere welcome to all these, he said he hoped they were right in seeing in this powerful medical phalanx an imprimatur of the unity of medicine, the welding into it of the branch which this Association represented, and a belief that each could render to the other mutual support, which received support from the presence of the President of the Federation of Medical and Allied Societies, Sir Berkeley Moynihan, who had come all the way from Leeds to be present. They took it as no small compliment that Dr. English, of the corresponding Association in the United States, had, at very short notice, sped here to join the company. The presence of the Chairman of the Springfield Hospital Committee (Mrs. How-Martin) gave the opportunity for saying how much they all appreciated the entertainment and practical help to the meeting of the Association which her Committee had enabled their Hon. General Secretary, Dr. Worth, to arrange. The Association was likewise grateful to Mr. Sanger, Chairman of the London Asylums and Mental Deficiency Committee, for allowing the visits to their four hospitals at Epsom. They were also glad to have with them Mr. H. F. Keene, the Asylums Officer, and Mr. W. C. Clifford-Smith, the Asylums Engineer, and Sir Duncombe Mann, Clerk to the Metropolitan Asylums Board, and Miss Vickers, who had done so much after-care for mental cases. And he would wish to mention among the private guests Sir Cecil Chubb, Bart., whose name would ever be gratefully remembered for his efforts on behalf of the mentally ill, and for his gift to the nation of Stonehenge. Each and all were most cordially welcome. He asked the company to drink to the toast, coupled with the names of the Bishop of Worcester and the Right Hon. Lord Justice Atkin.

The LORD BISHOP OF WORCESTER, in reply, said he felt entirely at a loss to account for his being called upon to reply for the guests, considering the extraordinary accomplishments of the guests in the matters which most concerned the Association. But he yielded to nobody in his admiration for the President, for during the war His Lordship had a good many dealings with him and they were invariably unpleasant. (Laughter.) The magnificent hospitals which the Board of Control placed at the disposal of the troops were, in a measure, handed over fully equipped, and it became necessary for the Department which he represented in the war to regard the equipment as absolutely perfect. The part of the equipment with which His Lordship was concerned was, generally, the chaplain of the asylum. No one knew better than did Dr. Bond the virtues of those chaplains, but it was not always quite easy for a man who had been dealing all his days, or for a large part of his life, with the spiritual requirements of the insane, to turn at once and try to satisfy what "Tommy" really had, a spiritual twist which was peculiarly his own. And it so happened—in fact it was bound to happen—that his friend Dr. Bond and he came to amiable blows over the qualifications of some of these chaplains, and formed, quite happily, a great friendship between their two selves. That was why his lordship was present to-night, not because he was in any way fit to say anything in this assembly. Indeed, quite the contrary was the case. The only criticism he would venture to pass upon the Medico-Psychological Association's proceedings was, that it had chosen to meet at the same time and in the same city as the National Assembly of the Church of England, one of those bodies which had been set up by some of the recent legislation referred to by the Lord Chancellor; and he was exceedingly glad to hear from the noble Lord

that when really amazing legislation was passed through the House of Lords, it was possible to get it abolished. (Laughter.) He could assure the company there had been moments in the course of that very day when, as he listened to what was said in that assembly, he wondered whether he had lost his reason, or whether the majority of the speakers had parted with theirs. And then it came to his mind that it was all on account of this particular Association, which had come to London for its quite proper and, he was sure, most useful deliberations, but that somehow those who were their proper charge had got loose and had appeared in the Church assembly dressed as archdeacons or even as something higher still, and that was why the sentiments expressed were so extraordinary. Then there came upon him an access of modesty, and he said to himself, "No, it is you who are the lunatic," and therefore he proceeded to put himself under proper care. He passed from Church House, along Great College Street to the House of Lords, and entered the door sometimes called "The Bishops' Door," and at the top of a winding staircase, under the Victoria Tower, he came, in due course, to a padded chamber. And, on the most padded seat in that chamber there sat, in the torrid conditions we had been enduring, the noble viscount, in a very heavy wig and a considerable silk gown. (Laughter.) Presently, in order to make it quite certain that his lordship (the speaker) was really in a place where such people were being cared for, there came in a procession of some five or six splendidly apparelled gentlemen. One of them his lordship had seen years before in Sir John Tenniel's illustration in *Alice in Wonderland*, but the rest of them were apparelled in quite heavy furs, and what was not fur was of a colour that rivalled that of the greatest of Turner's canvases. And they bowed to one another in the most ridiculous way, except the noble Viscount, who preserved his entire decorousness throughout. He (the Bishop) came to his reason shortly because he discovered he was really at such a temperature the only sensibly clad person on the floor of the House, but in the Gallery there were some six swarthy gentlemen, clad mainly in napkins. He had no idea from what part of the dark continent they came, but he did not doubt they were there with the full knowledge of the Lord Chancellor. He, the speaker, had gone into the Bishops' room and thrown off his coat and put on what was really a flimsy piece of white linen, and he was really cool. He wished, in all seriousness, to say this: he would not like it to be thought that what he represented was in any way out of sympathy with those most important and blessed investigations which the Association was carrying on. Twelve months ago quite a large number of bishops assembled in England, and had before them various questions which touched mental alienists. One of the results of their consideration was to decide that it was necessary that part of the training of a man for the ministry of the Church should be some course in psychology. He could not impose on the young men coming to him for ordination a line of study on a subject of which he himself knew nothing, and when the bishops decided that that was their duty in regard to what might be called the sons of the prophets, they took that duty upon themselves, and his lordship did not doubt they meant to carry it through. (Applause.)

The Right Hon. LORD JUSTICE ATKIN, in responding, said it was a very serious task to embark upon an after-dinner speech at that time in the evening, especially before an audience of mental experts. And if mental stability was fairly judged by an after-dinner speech—as to which his hearers were authorities and he was not—he must crave indulgence. All he would like to say was, that if there were any ulterior purpose in putting up the guests to make speeches for the intention to make scientific research or otherwise, they would like to be judged by the Right Rev. Prelate who had just addressed the gathering, in spite of the admissions he had made as to his recent associations. (Laughter.) And there was the further task, which devolved upon either the Bishop or himself—he would say the Bishop—of taking responsibility for the lady guests. But he thought he could safely say on behalf of all the guests that they were very grateful for the kind way in which their health had been proposed, and for the kind hospitality which had been extended towards them. (Applause.) He knew he was himself present by reason of his association with the Medico-Legal Society. In respect to that, they did have frequent discussions and most amicable relations with members of the medical profession, many of whom belonged to the Medico-Psychological Association. There was only one personal note he wished to touch on. It was that many medical members of that Society had an obsession which made it impossible, in the Medico-

Legal Society, to discuss the question of insanity in any relation at all without the medical members at once falling upon the question of criminal responsibility and denouncing the legal profession for the rule in the Macnaghten case. He did not propose to discuss that question now, but he had already stated on another occasion that he thought it quite possible that that rule might be improved, *i.e.*, the formula. He could understand that a case might arise of homicidal mania in which it would be very difficult to say that the particular person either did not know the nature and quality of his act, or that that which he was doing was wrong. All he would say to the medical profession was that from the legal point of view they were prepared to accept an amended formula, and all they asked was that the medical men would comply with two conditions: One was that there should be a reasonable degree of unanimity on the part of the medical profession as to what that modification should be, and the other was it should not be a formula which would have merely the effect of transferring all the inhabitants of His Majesty's prisons to the various mental hospitals in the country. And it must not be of too far-reaching an effect. Subject to that, and subject to getting over their obsession, the members of the Society derived the greatest benefit from their medical members. This was not the time upon which to deal with the whole question of the relations of insanity to the law; it was a very large subject; he would therefore say nothing beyond renewing his expression of thanks, on behalf of the guests, for the very pleasant evening which had been afforded them. (Applause.)

Sir JAMES CRICHTON-BROWNE, F.R.S., said he could not, by any stretch of imagination, persuade himself that he was a visitor at a meeting of the Medico-Psychological Association, for he believed he was the oldest member of that body present. He occupied the chair of the Association in the callow days of forty years ago, and his relation towards it was more patriarchal than casual. But he was glad to pose for a few minutes as a visitor, and to say that they were there to not only enjoy the Association's hospitality, but to show their esteem for the gifted man of many public services who occupied the chair, and to show them the national, nay the world-wide work which this Association was carrying on. This Dinner was a memorable one owing to the presence of the Lord Chancellor and the Minister of Health, but it was also an unique one because, he was told, never at any dinner of this Association, nor indeed at any dinner anywhere, had there been such a collection of lunacy officials. The Board of Control was present almost *en bloc*, the Lord Chancellor's Visitors were here, also a Commissioner for Scotland and an Inspector from Ireland. And the marvel was how the lunacy of the country was getting on without them. The Dinner was unique in another respect, for this was the first occasion on which a public lunacy official, in the form of a Lunacy Commissioner, had occupied the chair of the Association. In that connection he was compelled, as a patriotic Scottish member, reluctantly—for the company would know how modest, retiring and unassertive Scotsmen were—(Laughter)—to point out that sixty years ago his own father, then a Commissioner in Lunacy in Scotland, occupied the chair, and that after him came Sir James Cox and Sir Arthur Mitchell, both Commissioners in Lunacy in Scotland. Thus in that, as in many other lunacy matters, Scotland had led the van. He would now revert to England, in which country, happily, his lot was cast. In connection with the presence of the Lord Chancellor, he recalled that in this country the custody of the fools, part of the Royal prerogative, was delegated, under the Sign Manual, to the Lord High Chancellor. In the course of time—and, he presumed, in anticipation of Carlyle's discovery that the millions of people in this country were "mostly fools"—the charge became too comprehensive even for a man of Lord Birkenhead's abilities, and the legal custody of fools was now restricted. He continued: Outside that group there was a fringe like Einstein's space, limited but without boundary, a fringe of mental disorder, partial, temporary, incipient insanity, of what is called "nervous breakdown," "neurasthenia," insanity in the making; and it is in that fringe that we feel now we can do the most valuable work in the arrest, the treatment, the cure of insanity. It is there that "the little rift within the lute," taken in time, can be remedied, but which, left, made music mute and silent. If it is to be done we must have more freedom than we have had hitherto in applying our methods of alleviation. Some old prejudices must be removed, some unnecessary legal restrictions, dating from the era of *Valentine Vox* and *Hard Cash*, must be abolished. Our asylums, while not ceasing to be seats of refuge and homes for the stricken and afflicted, must

become hospitals more and more to which all those threatened with mental trouble may promptly resort for advice and treatment. Handicapped as they have been in the past, our asylums have done splendid work, and have restored to health and usefulness 40 *per cent.* of even confirmed cases. Emancipated, as we hope they will be, they will still achieve even more significant results. It is outside that fringe of incipient insanity in those great sanitary areas, forerunners of the vision of the Minister of Health, that the campaign against insanity, if it is to be effectual, must be vigorously carried on. It is in these areas that the genesis of insanity takes place, and whatever contributes to the corporeal welfare and moral elevation of our people must make them immune to the inroads of mental disease. Those zymotic diseases which specially fall to the cognisance of the Ministry of Health are responsible for a considerable amount of mental disease. And there is one mental disorder, the most fatal and deplorable that we know, that can be prevented by a simple sanitary precaution, and that ought to be prevented, let puritanical bigotry say what it will. It will be a long time before sanitary measures will rid us of it, and our scientists must carry on that research work, in which our best hope of remedial measures rests. In these recent days there has been no startling discovery, not since the discovery of the localisation of function in the brain; but there has been a change in our conception of the pathology of changes in the nervous system, and the reactions which take place between it and every organ, tissue and gland in the body. And now not only the physical but the psychical aspects of insanity are having increased attention bestowed upon them, and subtle changes, which must be ultra-microscopical, are being investigated. In connection with the psychical aspects of insanity, I would point out that while every advance of science has been reflected in the delusions of the insane, what is more remarkable is that the delusions of the insane may be realised in the discoveries of science. Any man who, sixty or seventy years ago, had said the human voice would be heard a thousand miles away, and that the upper air would swarm with airships and flying machines, would have been in danger of certification. But now all these things are being realised, and at the present moment our study of the electron leads us to believe that we are within measurable distance of "the philosopher's stone" and the transmutation of metals, to say nothing of the appalling consequences which may result from the release of the energy of the atom. And not only so, a more alarming feature is that what we used to regard as the wildest vagaries of insanity are philosophic truths. We are told that space has four dimensions, that the postulates of Euclid are all wrong, and that 2 and 2 do not make 4. From the medico-psychological point of view, relativity seems to be a brain-racking business, one which is not unlikely to lead the ordinary man who tries to grapple with it into confusional insanity. But I have some consolation. The other day I was speaking to one of our greatest physicists, and I said "I suppose, as Einstein is coming to London, we had better take the picture of Newton down, representing the fall of the apple, and substitute a futurist or a cubist representation of Einstein standing on his head?" He said: "No, Newton must for ever hold his own." I may say, in conclusion, that I look with sanguine expectations on future psychology, and especially medico-psychology. Now it is a matter of public interest, and you cannot read the leading article of a newspaper without coming upon the word "psychological," or the words "psychical phenomena," or something psychological. For my own part I would ask that psychology shall have a scope which is wide, which touches upon all human interests, which elucidates not merely the causation of the mind diseased, but enables us to understand the mechanism of the mind in its normal operations. It throws light upon education and criminology, and many other complex questions, and it may even help the statesman and the politician and the diplomatist by its ethnical studies, by differentiating the traits and tendencies of the different races of mankind. The Medico-Psychological Association, if it has a future as happy as the past, then in the words of a poet laureate:

"When fewer tears shall fall,
'Tis thus we dream;
When younger brows shall brighter laurels have,
Lovelier, softer shall the rosebuds be."

On behalf of your guests, permit me to thank you for the interesting and delightful evening which you have provided. (Applause.)

"THE MEDICO-PSYCHOLOGICAL ASSOCIATION."

SIR JOHN BLAND-SUTTON, in proposing this toast, said it was a great pleasure to him to propose it. He was in no sense an expert psychologist, and it had been a great interest to him that Sir James Crichton-Browne had dealt with the serious side of medico-psychology. He, Sir John, supposed he had been asked to propose this toast because the President of the Association was a colleague of his at Middlesex Hospital. Therefore he had learned the importance of psychology. He had tried to impress on students the importance of psychology in attempting to teach them surgery. He said to them: "You come round here to learn surgery; the principles of surgery can be described on the back of a postcard. You should learn psychology, which is really human nature. And the more thoroughly you learn that—whether you are going to be a lawyer or whether you are going to be a doctor—the more successful you will be in practice." The Judges were sometimes deficient in psychology, in spite of their learning and their experience. He read in the *Times* two months ago—and he took an interest in the *Times*—that a very witty Judge said in the course of a case, "You can get six medical men on one side of Harley Street to swear to an opinion one way, and then get six men from the other side of Harley Street to swear the opposite." That judge must be wanting in psychology, because when there was a lunacy case before the Court, one got a big legal luminary, drawing big fees and refreshers, trying to persuade the Judge that the plaintiff is as sane as the jurymen in the box; and on the other side one had equally brilliant K.C.'s, backed up by solicitors, sometimes by clergymen, and generally by a nurse, to swear that the man was so far gone that he was only fit for a lunatic asylum. What does it mean? It was not the frank cases of lunacy which gave the trouble, but the borderland cases; it was in those that all the difficulty arose. Why were those cases so difficult? In spite of all that Sir James Crichton-Browne said about the brain, what a complex structure and how inscrutable was the organ of the mind! It weighed 50 oz.—as much as a man's liver—but if one took the brain of an ex-Lord Chancellor and the brain of an ex-President of this Association, and the brain of an Archbishop and the brain of a verger, shuffled them, and gave them to Sir Frederick Mott to examine, he would not be able to tell one from another. He might measure them and study their convolutions microscopically, but he could not even measure the intelligence of those brains. Yesterday he interested himself in looking at the brain of a great mathematician supposed to have a wonderful brain. He, Sir John, compared it with the cast of the brain case of Jonathan Wild, and there was no difference in their size. But it could be said for each that they were masters in their own spheres. My Lord Camperdown came down and complained of being out of sorts, saying that his liver was out of order. But it was not his liver, it was his mind. The butler knew full well that the trouble may have been due to a glass of badly-decanted port, or the doctor knew it might be due to a sore corn. And if one went to the laboratory and talked to the physiologist, he would tell one that the brain had nothing to do with it, and that the doings of the mind, as well as of the body, our conduct and our mental energy, were almost wholly controlled by a Pantheon of ductless glands, of which the most powerful deity was the pituitary body. With the men of the specialty represented in this gathering he had great sympathy, especially with junior medical officers of asylums, who had to attend to the forcible feeding of patients who had no wish to be kept alive. And he had even more sympathy with medical officers of prisons, who had to look after political hunger strikers, because if anything happened to them in the course of the forcible feeding, the medical officers would be rebuked by the authorities for preventing an opportunity for political martyrdom. A remarkable case of this sort happened six hundred years before Christ. Zedekiah, King of Jerusalem, did not see the fun of being a vassal of Nebuchadnezzar, or to Babylon; and at that time there lived in Jerusalem a troublesome man called Jeremiah. And he was as much a thorn in the side of Zedekiah as certain hunger-strikers were in the sides of the Prime Ministers of to-day. Those old Prophets were the politicians of the time, and what they said was regarded as gospel by the people; they believed, as some of the stupid people to-day believed, in the leading articles of their favourite newspaper. The princes and elders were upset by this man, and they put Jeremiah into a dungeon, and he stuck in the mud. And the King's chief eunuch went and told Zedekiah, and said, "What will happen if this man dies in

the well?" He had the prophet hauled out of the miry dungeon of Malchiah. The story was dramatically told in the thirty-eighth chapter of Jeremiah. From his, Sir John's childhood, he had taken a deep interest in Bible stories: they were so dramatic and so pictorially told. To-day people put their minds together to see what they could do to take care of lunatics who were troublesome to their relations; but they allowed to go free political Jeremiahs who were such a terrible trouble. He would merely say, in conclusion, how much he appreciated everything that had been said as to the wonderful things medico-psychologists had done. All knew the brilliant work which was done in the war, and he was certain from the way they were working now that the science and art of psychological medicine was advancing. (Applause.)

The PRESIDENT replied on behalf of the Association, and the proceedings then terminated.

SOUTH-EASTERN DIVISION.

THE SPRING MEETING of the South-Eastern Division was held by the courtesy of Major Findlay and Dr. R. G. Rows at the Special Neurological Hospital, Church Lane, Tooting, on Wednesday, May 4th, 1921.

The members were entertained to luncheon and were afterwards shown round the Hospital and workshops.

The meeting was held at 2.30 p.m.

The minutes of the last meeting were taken as read and confirmed.

Dr. J. Noel Sergeant was re-elected Honorary Divisional Secretary, and Drs. John Brander, Francis Henry Edwards, John George Porter Phillips and Robert H. Steen were elected Representative Members of the Council for the year 1921-22. Drs. James Farquharson Powell, George William Blomfield James and Thomas Beaton were elected members of the Divisional Committee of Management.

It was decided to accept with thanks Dr. C. M. Tuke's invitation to hold the Autumn Meeting at Chiswick House early in October.

Dr. J. Tylor Fox then read a short paper on "Luminal-Sodium in Epilepsy."

Dr. Rows gave a brief outline of the methods of treatment employed at this Special Neurological Hospital, and Drs. Todd, Miller and Dallas Ross followed with interesting accounts of the treatment of special illustrative cases.

A brief discussion followed, and the members were then entertained to tea, which concluded an extremely interesting and instructive meeting.

THE GERMAN INSTITUTE OF PSYCHIATRIC RESEARCH.

THE second volume of *Arbeiten aus der deutschen Forschungsanstalt für Psychiatrie in München*, 1921, contains the Report of the Institute presented January 3rd, 1920. The period since the last report (May 24th, 1918) has been especially disastrous by reason of the loss sustained through the deaths of Brodmann and Nissl. The sad circumstances of Brodmann's death have already been noted in these pages (*Fourn. Ment. Sci.*, January, 1921, p. 148). The report states that as he was, with the single exception of Oskar Vogt, of Berlin, the only investigator who could work out the topographical histopathology of the brain cortex independently, it is impossible to fill his place, and his department must therefore be abandoned until the younger generation produces a fit successor. Only a few months after Brodmann's death his young widow succumbed to influenza. Through the generosity of one of its founders, the Institute has been enabled to assure to his little daughter, besides provision for her upbringing, an eventual dowry.

Not less grievous than the loss of Brodmann is that sustained through the death of Franz Nissl. He had been in poor health for the last ten years, but while he was at the Institute, as head of one of its two departments of pathological histology, he had displayed an unbroken power of work, and it was hoped he might continue his scientific labours for many a long day. Unfortunately, in June, 1919, his condition became rapidly worse, and he died on August 11th, 1919, at the age of 58. He was indisputably the most eminent of all investigators

of the pathological histology of the brain cortex; indeed, it was he who, more than anyone else, laid the foundations for this branch of science.

The report says that the defeat of Germany in the war has, as might have been expected, interfered with the work and growth of the Institute, partly through the rise in prices, and partly through a falling off in subscriptions and donations. Those received since the last Council meeting amount to 478,100 marks. It is noted, as a matter for regret, that little more than 100,000 marks has been subscribed in Bavaria itself, the State in which the Institute is situated. The letting of laboratory tables (see *Journ. Ment. Sci.*, January, 1921, p. 86) has not progressed. This is explained partly by the increased cost of living, and partly by the shortage of medical men in Germany. Three tables in the anatomical department have been occupied, and one each in the psychological and clinical departments. Some further tables in various departments will shortly be occupied.

The library now contains 14,637 volumes. By gift and bequest the Institute has acquired a great part of Brodmann's scientific remains, including a collection of rare and precious brains, and his books, lantern-slides and plates have been acquired by purchase. Nissl bequeathed to the Institute the whole of his scientific remains, all his preparations, and his library. A great part of Alzheimer's library has been presented to the Institute by his son-in-law.

In preparation for the further development of the Institute, the plans for the proposed admission station at the Schwabinger Krankenhaus have been considered in conjunction with the Munich City Architect, and a conference has been held with the military and pension authorities, as a result of which it is arranged that a special building shall be erected there for the treatment and study of cases of war wounds of the brain. When, in the course of years, these cases have died off, this building will serve as an annexe to the admission station.

EDUCATIONAL NOTES.

The Maudsley Hospital.—The lectures and practical courses of instruction, Part II, for a Diploma of Psychological Medicine, are announced as follows:

Six Lectures on the Pathology of Mental Diseases, including Brain Syphilis, its Symptomatology and Treatment. By Sir Frederick Mott, K.B.E., M.D., LL.D., F.R.S. On Mondays, at 2.30 p.m., commencing on October 3rd.

Eight Lectures on the Psychoneuroses. By Bernard Hart, M.D., Lecturer, Mental Diseases, University College Hospital. On Mondays at 5 p.m., commencing on October 3rd.

Twelve Clinical Demonstrations in Neurology. By Sir Frederick Mott, K.B.E., M.D., F.R.S., F.R.C.P., and F. Golla, F.R.C.P., Physician, St. George's Hospital. On Tuesdays, at 2.30 p.m., commencing on October 4th. *The First Six Demonstrations* will be given by Dr. Golla at the Hospital for Paralysis and Epilepsy, Maida Vale. An announcement will be made later regarding the Six Clinical Demonstrations by Sir Frederick Mott.

Eight Lectures on the Practical Aspect of Mental Deficiency. By F. C. Shrubbsall, M.D., F.R.C.P. On Wednesdays, at 2.30 p.m., commencing on October 5th.

Six Lectures on Crime and Insanity. By W. C. Sullivan, M.D., Medical Superintendent, Broadmoor Asylum. On Wednesdays, at 4.30 p.m., commencing on October 5th.

Eight Lectures or Demonstrations on Differential Diagnosis and Treatment of Mental Disorders—Legal Relationships of Insanity. By C. Hubert Bond, D.Sc., M.D., F.R.C.P. On Thursdays, at 2.30 p.m., commencing on October 6th.

Eight Lectures on the Symptoms of Mental Disease. By E. Mapother, M.D., M.R.C.P., F.R.C.S. On Thursdays, at 4.30 p.m., commencing October 6th.

King's College (University of London), Department of Psychology.—A course of lectures on Psychology and Psychotherapy will be delivered by William Brown, M.A., M.D., D.Sc., M.R.C.P., on Tuesdays, at 5.30 p.m., beginning October 18th.

October 18th: General introductory survey.

October 25th: Mental dissociation—subconscious—co-conscious—unconscious—theories of Pierre Janet and Morton Prince.

November 1st: Suggestion—hypnotism—theories of Babinski and Dejerine, Bernheim and Coué.

November 7th (Mon.): Psychoanalysis—general theory of Freud—psychology of dreams.

November 15th: Mental conflict—repression—symptom formation—abreaction—transference.

November 22nd: Transference and suggestion—theories of Jung and Adler.

November 29th: Theories of McDougall, Myers, Rivers, and others of the British School.

December 6th: Nature of Personality—psychotherapy and ethics—conclusion.

PARLIAMENTARY NEWS.

HOUSE OF COMMONS.

June 28th, 1921: Mental patients.—Sir A. SHIRLEY BENN asked whether the next-of-kin of private patients in mental institutions, including the next-of-kin of ex-service men, were informed by the lunacy authorities that they possessed the privilege conferred upon them by Section 71 of the Lunacy Act, 1890, of directing the discharge of the patient, provided he could not be proved to be dangerous and unfit to be at large.—Sir A. MOND assumed the reference to be to Section 72. As regards private patients generally, this provided for the discharge of the patient by the person on whose petition the reception order was made. As regards ex-service men, he recalled the answer he gave on June 16th to the effect that when a patient was sufficiently recovered to raise the question of his discharge, he was informed of the legal position.

July 6th: Married persons in lunatic asylums.—The HOME SECRETARY was unable to state, in answer to a question by Mr. Rendall, how many married persons there are in the lunatic asylums in England and Wales, and how many of these had been certified for over five years, but he promised to try to get the information.

August 3rd: The administration of asylums.—Dr. McDONALD asked if the attention of the Minister of Health had been called to a publication by Dr. Montagu Lomax containing grave charges of inhumanity in the administration of our asylums, and as these charges were specific and the alleged inhumanity was inferred rather than witnessed by Dr. Lomax, would he cause inquiries to be made as to their truth in order to relieve the anxiety of many of the public who had relatives confined in these institutions.—Sir A. MOND replied that his attention had been called to the statement in the book. The visiting committee of the asylum at which Dr. Lomax was employed as *locum tenens*, and to which he evidently referred, had already been asked by the Board of Control for their observations; as soon as these had been received he would consider what further action was necessary.

August 5th: Service patients in mental institutions.—Col. WEDGWOOD asked the Ministry of Pensions how it happened that, in default of any authority possessed by him to intervene in matters coming within the scope of the Lunacy Acts, a medical officer from pensions headquarters joined in the visits paid by the Lunacy Commissioners, and was invited to report on the mental condition of service patients in county asylums; and would he, in view of the admitted irregularity of such procedure, take steps to put an end to unauthorised decisions emanating from pensions officials, where such intervention was directed to the release of ex-service men from unjustified detention.—Mr. MACPHERSON replied that the medical inspector of his department, who, by the courtesy of the Board of Control, visited mental institutions in which ex-service men were under treatment, did not intervene in any way in matters coming within the Lunacy Law, but acted solely in the interests of "service patients" as pensioners. On the particular occasion which he understood that Col. Wedgwood had in mind it was known to the Board of Control that the Ministry inspector was about to visit the hospital, and they took the opportunity of availing themselves of his opinion on the case. Such opinion was in no sense a decision, nor was there any irregularity in the procedure of obtaining or furnishing it. The arrangements for the visiting of asylums by a Ministry official were in the best interests of ex-service men, and it was, moreover

one which was considered and approved by the recent Departmental Committee of inquiry.

August 11th; Vaccine treatment of lunacy.—Mr. GOULD asked whether the attention of the Minister of Health had been drawn to the articles in the press in reference to the cure of lunacy by vaccine injections; whether he was aware of the allegations that many potentially healthy-minded persons were needlessly confined in an asylum because of the lack of proper curative treatment; and whether he would initiate an investigation into the Lunacy Laws and asylum administration with the object of making such treatment available to the mentally afflicted confined in asylums.—Sir A. MOND said he had seen the article. There was no obstacle to the use of vaccine in any case in which that form of treatment was considered suitable by the medical authorities of an asylum. He had under consideration the question of possible reforms in lunacy administration and treatment.

CORRESPONDENCE.

To the Editor of the 'Journal of Mental Science.'

DEAR MR. EDITOR,—Most of your readers have been interested in Dr. Lomax's "*Experiences of an Asylum Doctor*" and the comments of various newspapers on its contents.

On pages 126-7 Dr. Lomax refers to Section 283 of the Lunacy Act 1890 and purports to quote this section. But he omits entirely sub-section 3, and quotes sub-section 4 (which can only be read in connection with sub-section 3) as sub-section 3.

Starting with a fallacy he devotes a considerable space of the chapter on "asylum food" to an assertion that a visiting committee may under this section increase the ordinary rate of maintenance in order to devote the excess to the upkeep and repair of the institution, while neglecting the food and personal requirements of the patients. Anyone who has a working acquaintance with the Lunacy Acts knows that this is not the case.

Yours faithfully,

H. F. KEENE.

13, ARUNDEL ST.,
STRAND, W.C. 2;
October 21st, 1921.

NOTICES OF MEETINGS.

Annual General Meeting.—First week in July, 1922, at Edinburgh.

Quarterly Meetings.—November 22nd, 1921; February 23rd, 1922; May 25th, 1922.

South-Western Division.—October 28th, 1921, at Bristol Mental Hospital, Fishponds, Bristol; April 28th, 1922.

Scottish Division.—November, 18th, 1921, at Edinburgh.

Irish Division.—November 3rd, 1921; April 6th, 1922; July 6th, 1922.

NOTICES BY THE REGISTRAR.

Nursing Certificates.—The next examinations will be held as follows:

Preliminary November 7th, 1921.

Final November 14th, 1921.

Attention is drawn to the rule that the written examinations must commence not later than 10 a.m.

The new handbook for mental nurses will not be ready until early in 1922.

The Preliminary Examination (*i.e.*, the first of the First Examinations under the New Regulations), to be held in May, 1922, will be according to the syllabus of the present Preliminary Examination.

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